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ABSTRACT

Intended to help ABE (Adult Basic Education) teachers learn to design effective learning activities, this handbook provides activity suggestions, informative materials, and sample forms and materials. Section 1, Adults as Learners, discusses the adult learner's unique characteristics and includes an article on teaching strategies and learning styles. Deciding What to Teach (section 2) emphasizes three critical concerns--need, want, ought to have. The third section, Setting the Climate, gives thirty-five get-acquainted ideas and three articles on nonverbal communication. Section 4, Organizing for Instruction, presents an instructional model based on these five steps: (1) Where Am I? (diagnosis/assessment), (2) Where Am I Going? (state and select objectives), (3) How Will I Get There? (select and implement strategies), (4) How Will I Know When I Have Gotten There? (measure accomplishment of objectives/re-diagnosis), and (5) How Well Did I Do? (evaluate). Charts, articles, sample materials and instruments, descriptions of teaching methods, and a teacher self-evaluation are included. Section 5, Individualized Instruction, provides an opinionnaire and forms for developing diagnostic approaches and selecting activities. The final section, the GED (General Educational Development) Test, presents basic data about test content and test-taking skills. Appendixes include APL (Adult Performance Level) objectives, additional activities, and an evaluation packet. (YLB)

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IDEA BOOK FOR DESIGNING MORE EFFECTIVE LEARNING ACTIVITIES

Compiled and Edited by

Waynne James
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Occupational and Adult Education
Oklahoma State University

ABE Teacher Training Workshop
Stillwater, Oklahoma
July 23-27, 1979

CE 024 834

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PREFACE

Many of the studies that have attempted to identify the competencies needed by ABE teachers have recognized the importance of a teacher's ability to design effective learning activities. Teachers constantly have requested assistance in increasing their teaching effectiveness. The workshop conducted at Oklahoma State University was an attempt to provide some of the skills related to effective teaching; this handbook is an outgrowth of the ideas presented at that workshop.

Improving instructional effectiveness begins with an exploration of the questions: What is instruction? and How can teaching effectiveness be improved? Addressing the following instructional model will serve to provide a basis for improving instructional planning.

* Assess the student
* Select and state objectives
* Select and implement instructional strategies
* Measure learning
* Evaluate

WHERE IS THE LEARNER NOW?

Assessing the strengths and weaknesses of each learner is the initial critical step in the instructional model. A variety of approaches to assessment are necessary, mixing both formal and informal means of information collection.

WHERE IS THE LEARNER GOING?

Stating the intent of the educational experience from the learner's view is an important process. This includes identifying objectives in the affective domain, as well as specifying objectives at higher levels of thought in the cognitive domain.

HOW IS THE LEARNER GOING TO GET THERE?

Selecting and implementing strategies include the choice of methods and techniques for presenting information, as well as selecting the resources to be used. The important point at this stage of the model is identifying students' significant differences. Pinpointing the differences of learners and selecting appropriate strategies to accommodate those differences are crucial for teacher effectiveness.

HOW WILL THE LEARNER KNOW WHEN HE/SHE HAS GOTTEN THERE?

The measurement of learning is basically a reassessment to see if the learner has learned anything. It is largly a numerical, counting process intended to provide an estimate of the learner's present status of knowledge.

HOW WELL DID THE PROCESS GO?

Although the evaluation includes measurement, it involves more than measurement techniques. Evaluation includes professional judgement about the decisions and approaches already made in other stages of the model.

Special thanks for this project is extended to the Consultants: Russell French, Cheryl Moore, and Bob Renk. Also, thank you to the participants at the workshop, the team leaders, and all others who had input into the product. I hope you find this to be a useful "Ideabook".

Waynne James
Project Director

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I. Adults as Learners

This section of the Ideabook looks at some of the unique characteristics of the adult as a learner.

The first activity, "For Every Hundred," places the Oklahoma adult population's levels of education into perspective. It is a visible, practical exercise designed to eliminate abstract concepts.

The Pedagogy-Andragogy exercise is designed in two parts. First, give the thirteen question repsonse page, Part I. Be sure to divide equally the forms for 16 years olds and 45 year olds. After the statements have been completed, compare the responses of:

1. 16 year olds
2. 45 year olds
3. 16 and 45 year olds.

Sixteen year olds and 45 year olds should respond differently. Next look at the chart comparing the andragogy and pedagogy, Part II. Relate the six assumptions to the thirteen questions previously answered.

The third activity "Characteristics of Adults" contains statements that are considered true of adults. Teachers are then asked to identify possible actions for handling the examples.

The article beginning on page 9, "Teaching Strategies and Learning Processes" explores such questions as "How do people learn?" "What's different about different learners?" It introduces the concept of learning styles (which is discussed again strating on page 76 and page 105) and attempts to relate all the information to the teaching process.

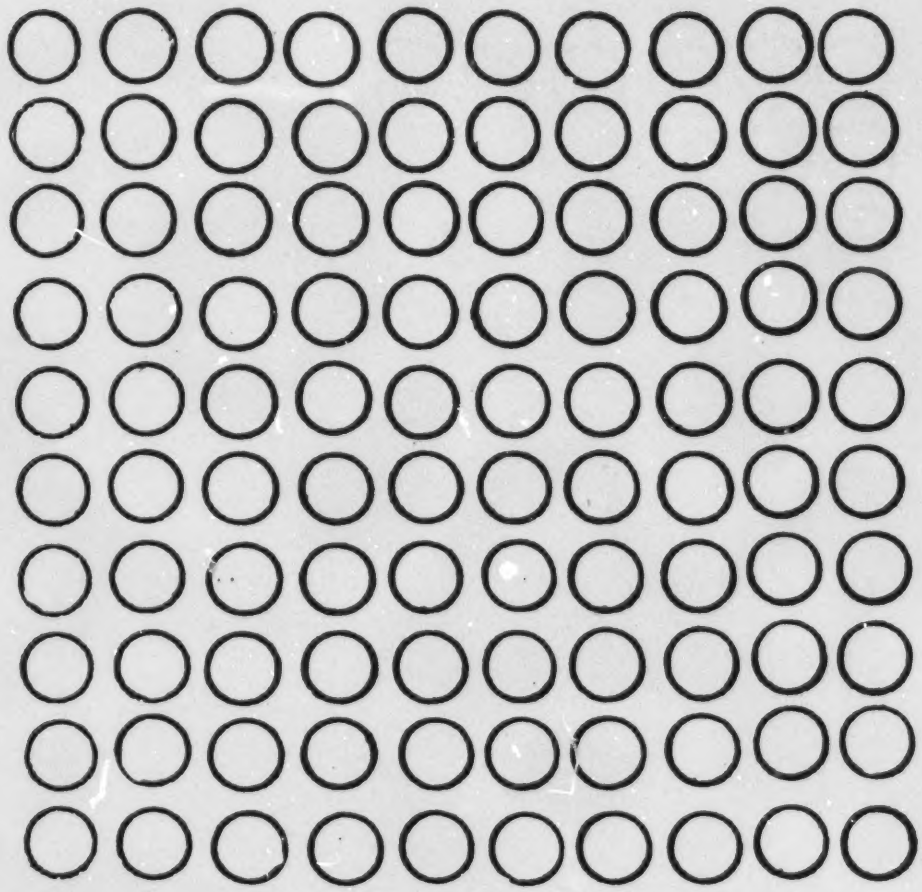
*FOR EVERY ONE HUNDRED

Often times numbers presented in the millions are too abstract to comprehend. Perhaps the following exercise will help put the startling number of undereducated Oklahomans into perspective.

1) There are 100 circles on this page. Let each circle represent one adult Oklahoman 25 years of age or older. Draw a box-like shape around a group of 48 of the circles. The circles in the box mean that, according to 1970 census data, 48 out of every 100 Oklahoma adults 25 years of age or older have less than a high school diploma.

2) Inside the box you've drawn, place an X in 16 circles. This means that 16% or 16 out of every 100 Oklahoma adults 25 years of age or older have less than an eighth grade education.

3) Finally, of those circles with X's in them, black out one. In other words, 1 out of every 100 of your fellow Oklahoma adults have never received any formal, public schooling.



*This exercise was conceived by Juanita Stanley, Education Service Center, Region II, Corpus Christi, Texas.

ADULT EDUCATION PROGRAM

P-A Role Study--Part I

For right now you are to assume the role of a 16 year old high school student. Please respond to the following statements as though you were the student. (check appropriate space.)

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
1. The things I am learning will be much more valuable to me in several years than they are right now.				
2. The most important thing for me to do at this time is to be a good student.				
3. Most of the really important decisions in the world are made by people much older than I am.				
4. My most important accomplishment is being a success in my chosen profession.				
5. My mother is the most important person in my life.				
6. Achieving civic and social responsibility is more important than finding a congenial social group.				
7. It is more important for me to get a job now than preparing for an advanced position such as branch manager.				
8. The first class of any education course should be devoted to short orientation and then everyone should be allowed to go home.				
9. My most time consuming role in life is being a student!				
10. I would prefer to take a course in "English" than one in "Writing Better Business Letters."				
11. It is more important for me to prepare myself for a happy and productive life than it is to improve my working skills.				
12. The main reason that I want to learn is so I can pass the test.				
13. Grades that one receives in a course are not as important as what one learns.				

A. Campbell, 1978

ADULT EDUCATION PROGRAM

P-A Role Study--Part I

For right now you are to assume the role of a 45 year old person who is participating in an adult education course. Please respond to the following statements as that person would (check appropriate space.)

	Agree	Somewhat Agree	Somewhat Disagree	Disagree
1. The things I am learning will be much more valuable to me in several years than they are right now.				
2. The most important thing for me to do at this time is to be a good student.				
3. Most of the really important decisions in the world are made by people much older than I am.				
4. My most important accomplishment is being a success in my chosen profession.				
5. My mother is the most important person in my life.				
6. Achieving civic and social responsibility is more important than finding a congenial social group.				
7. It is more important for me to get a job now than preparing for an advanced position such as branch manager.				
8. The first class of any education course should be devoted to short orientation and then everyone should be allowed to go home.				
9. My most time consuming role in life is being a student!				
10. I would prefer to take a course in "English" than one in "Writing Better Business Letters."				
11. It is more important for me to prepare myself for a happy and productive life than it is to improve my working skills.				
12. The main reason that I want to learn is so I can pass the test.				
13. Grades that one receives in a course are not as important as what one learns.				

A. Campbell, 1978

A COMPARISON OF ASSUMPTIONS AND PROCESSES OF PEDAGOGY AND ANDRAGOGICAL LEARNING (P-A Role Study--PartII)

A. Campbell, 1978

ASSUMPTIONS		
ABOUT	PEDAGOGICAL LEARNING	ANDRAGOGICAL LEARNING
Self-Concept (1,2,3,)	Dependent Personality	Increasingly Self-Directed Organism
Role of Learners' Experience (4,5)	To be built on more than used	A Rich Resource for learning
Readiness to Learn (6,7)	Directed by curriculum	Develops from Maturity, Life Tasks & Problems
Time and Learning (8,9)	Little regard for the passage of time or time restrictions	Limited time available or remaining for learning
Orientation to Learning (10,11)	Subject-Centered-Postponed Application	Task or Problem Centered immediate application
Motivation (12,13)	External Rewards and Punishments	Internal Incentives, Curiosity, Self-Concept

PROCESS ELEMENTS		
	PEDAGOGICAL	ANDRAGOGICAL
Climate	Formal Authority-Oriented Competitive Judgmental	Informal, mutually respect consensual, collaborative, supportive
Planning	Primarily by Teacher	By participative Decision-making
Diagnosis of Needs	Primarily by Teacher	By Mutual Assessment
Learning Goals & Objectives	Primarily by Teacher	Consensus
Designing a Learning Plan	Content Units, Course Syllabus, Logical Sequence	Learning Projects, Learning Content Sequenced in Terms of Readiness
Learning Activities	Transmittal Techniques, Assigned Readings	Inquiry Projects, Independe Study Experimental Techniques, Small-group techniques
Evaluation and Rediagnosis of Needs	Primarily by teacher	By Mutual Assessment of Self-Collected Evidence

*"Pedagogy," from the Greek work paid (meaning child) and agogus (meaning guide)--thus being defined as the art and science of teaching children.

"Andragogy," from the Greek word aner (meaning adult)--thus being defined as the art and science of helping adults (or even better, maturing human beings) learn.

*See Knowles, Malcolm, The Modern Practice of Adult Education. New York: Association Press, 1970.

CHARACTERISTICS OF ADULTS

INSTRUCTIONS

The exercise below contains six selected physical and social/psychological statements that "characterize" the adult. This means that they are true of adults in general but not necessarily true of each individual adult. Please read each statement, then write some possible implications for the teacher of adults. For clarification of the task, a sample statement with implications is provided below.

Sample Statement with Implications: An example of a social/psychological characteristic.

> Whereas the pre-adult is in the process of forming attitudes, beliefs and values; the adult generally already possesses a framework of attitudes, beliefs and values.

IMPLICATIONS:

1. Adults can be expected to be more decisive in their actions than pre-adults. Also, they may "turn-off" a teacher who is guided by attitudes and beliefs that are different than their own.

2. The teacher should try to discover present attitudes of students and should respect the same.

3. The teacher should recognize that a student's current belief system may hinder progress toward the student's learning goals. Changes in attitudes, beliefs and values are often difficult to achieve, especially in a short period of time. However...

4. If attitudinal change is necessary for other kinds of learning to take place, the teacher can help students: a) explore present attitudes; b) recognize possible conflicts or inconsistencies between current attitudes and desired goals; and c) chart plans for changing attitudes and reducing conflicts or inconsistencies. (Note: Some techniques helpful for #4 might be small group discussions, role-playing, values clarification exercises and exposure to a variety of people and experiences -- in a non-threatening atmosphere.)

Try to record at least three implications for each statement.

PHYSICAL CHARACTERISTICS

1) Auditory acuity (how well we hear) reaches its maximum peak somewhere between the ages of 10 and 14 years. Later, a general progressive decline is noted. The speed of hearing also lessons with age. Additionally, as they become older, women tend to lose power for hearing sounds of low frequency; men tend to lose power for detecting high frequencies.

IMPLICATIONS:

2) Visual acuity (how well we see) is at its best somewhere between the middle teens and the early twenties. The table below reveals the percentages of people with visual disabilities at varying ages.

AGE	% OF POPULATION WITH VISUAL DISABILITIES
less than 20	23%
20-24	32%
25-29	39%
30-34	40%
35-39	45%
40-44	50%
45-49	65%
50-54	75%
55-59	82%
60 and older	94%

IMPLICATIONS:

3) Frequently, the older the person the more time it takes for him/her to complete physical and manipulative tasks.

IMPLICATIONS:

SOCIAL/PSYCHOLOGICAL CHARACTERISTICS

4) In comparison to pre-adults, adults have had many more "life experiences."

IMPLICATIONS:

5) Adults have many diverse roles and responsibilities (e.g. parent, spouse, worker, citizen, consumer, use of leisure-time, child of aged parents, etc.)

IMPLICATIONS:

6) Adults are more individually different.

IMPLICATIONS:

TEACHING STRATEGIES AND LEARNING PROCESSES

*by Russell L. French

Teaching is not learning, and learning is not teaching. The two processes are different in nature, and each is controlled by a different individual. Yet, the teacher, while not being able to control the learning process, cannot develop the instructional process (objectives, strategies and activities, measurement, evaluation) without regard to what he/she presumes to be happening within the learner. In order to plan instruction, the teacher must have a personal answer to three crucial questions: "What is instruction? How do people learn? What is significantly different about different learners?" While the teacher's response to the first question is terribly important, in fact, basic to all successful instruction, this paper focuses on some appropriate, practical responses to the latter two questions.

HOW DO PEOPLE LEARN?

When an educator approaches the question, "How do people learn?", he is aware that there are different schools of thought regarding the answer. If the teacher has several years of classroom experience, his/her response to the question is probably tempered by that experience. Most experienced teachers are quick to suggest that there may possibly be differences between a child and a rat and between thirty children aggregated and a single rat. The implication is, of course, that learning theory and research leave something to be desired. Whatever the problems existing

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*Russell French is Associate Professor of Curriculum and Instruction at The University of Tennessee, Knoxville.

in learning theory and related research, the individual educator does not have the option of ignoring the question, "How do people learn?" In order to develop or select teaching strategies, methods or techniques, the teacher must have some notion of what he thinks will happen in the learning process.

One intriguing model of the learning process is offered by Asahel Woodruff.[1] Figure one presents a simplified version of that model.

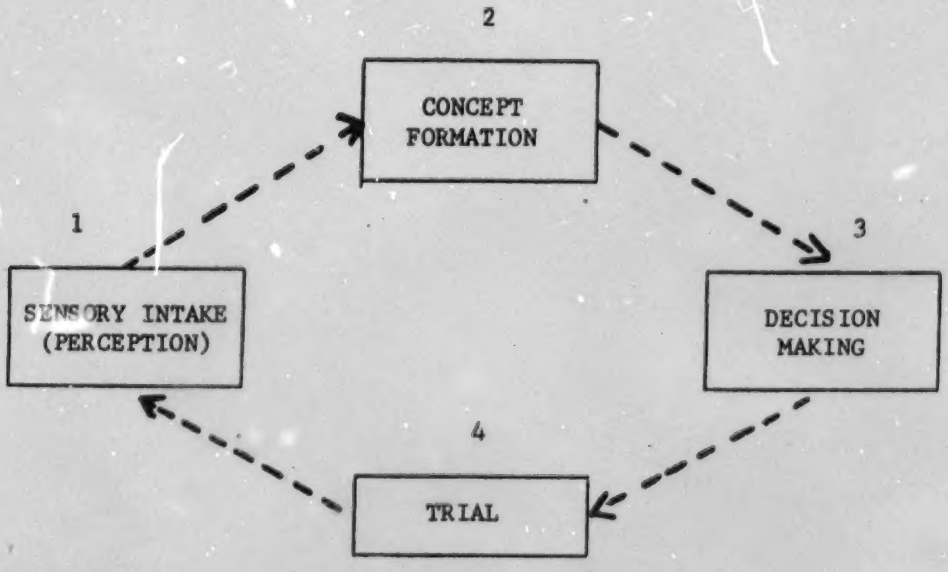

FIGURE 1. WOODRUFF'S MODEL OF LEARNING

Stages three and four of Woodruff's model hold particular implications for the development and selection of instructional strategies. If, indeed, the learning process is incomplete without the learner's participation in relevant decision-making and trial experiences appropriate to his decisions, the teacher must employ in the instructional process strategies which provide such opportunities. Role-play, simulation, critical-incident processes, games and case studies offer a few possible approaches to the instructional problem.

If the teacher views learning as a process different from Woodruff's conceptualization, other issues and problems present themselves. However, the point remains the same. Without personal responses to the question, "How do people learn?", our perspectives on instruction are limited and our practices insufficient.

WHAT'S DIFFERENT ABOUT DIFFERENT LEARNERS?

A concern for individual differences in learners is nothing new. Indeed, individual differences are mentioned often in the best educational literature. Most educators read and hear and use the term so often that they begin to assume that meaning is inherent in it. Few of us give enough thought to the nature of individual differences and their relationship to instructional methodology.

One way of responding to the question of individual differences is to suggest that every human being has a personal learning style. If this is true, it may mean that the survival of a learner in the public schools (particularly at the elementary level) is directly related to the correlation between my teaching strategies and his learning style. Obviously, some conceptual model of learning styles is essential to the teacher engaged in instructional planning and implementation.

This writer's observations of learners at all levels suggest that one might consider learning styles from a sensory-intake point of view. Within this framework, a list of personal learning styles might include:

STYLE	CHARACTERISTIC
PRINT-ORIENTED	Dependency on reading and writing
AURAL	A listener, doesn't say much
ORAL (INTERACTIVE)	A talker; learns through discussion

VISUAL	Must have many visual stimuli and visual representations
TACTILE	Has to touch everything and everyone
MOTOR	Has to move about while learning anything
OLFACTORY	Learns through taste and smell.

There may be combinations of these, thereby forming as yet undefined styles, but most of us can name at least one student who fits into each of the categories listed. Indeed, each of us can probably place ourselves somewhere in this list.

Another view is offered by those who perceive learning styles as:

STYLE	CHARACTERISTIC
SEQUENTIAL	Must perceive orderly relationships (B follows A)
LOGICAL	Uses processes of reasoning to reach conclusions
INTUITIVE	Perceives truths and facts directly without benefit of extensive reasoning.
SPONTANEOUS	Relies on impulse
OPEN	Uses combinations of the above or different ones of the above at different times.

Probably, neither of these views is wholly right or wholly wrong. Perhaps the assessment of learning style is a matter of diagnosing and locating the learner on a matrix something like that presented in Figure Two. (Figure Two, following page)

RELATING TEACHING STRATEGIES TO LEARNING STYLES

If the notion of learning styles and the specific styles outlined here reflect valid differences among learners, what are the implications for development and selection of teaching strategies? The first obvious conclusion to be drawn is that the teacher must select strategies congruent with the learning styles of those individuals he/she is trying to teach.

PRINT-ORIENTED	SEQUENTIAL	LOGICAL	INTUITIVE	SPONTANEOUS	OPEN
AURAL					
ORAL (INTERACTIVE)					
VISUAL					
TACTILE					
MOTOR					
OLFACTORY					

FIGURE 2. MATRIX OF PERSONAL LEARNING STYLES

Selection of strategies will have to be based on diagnosis of learning style. Diagnosis can best be accomplished through observation of the learner in a range and variety of experiences. Once diagnosis is accomplished, the match-up of teaching strategy and learning style can proceed in a logical, orderly manner. For example, strategies and techniques deemed most appropriate to sensory-input styles suggested here might be as follows:

STYLE	MOST APPROPRIATE TECHNIQUE
PRINT-ORIENTED	Reading, writing about, book based discussion
AURAL	Lecture, listen to panel discussion, sound film, television, audiotape
ORAL (INTERACTIVE)	Socratic discussion, panel discussion colloquy, dramatization, dialogue, interview, debate, T-group, role play, student verbal presentation, games, student demonstration

TACTILE	Nonverbal exercises, laboratory work, demonstration, "making and constructing" activities.
VISUAL	Slides, motion picture, filmstrips, television, still pictures, observer of dramatization, nonverbal exercises, demonstration, trips, exhibits
MOTOR	Role play, games, action mazes, nonverbal exercises, student demonstration, learning centers
OLFACTORY	Trips, exhibits, addition of taste and smell experiences to daily activity.

Teaching is not learning, and learning is not teaching. But, teaching strategies cannot be developed or selected in any meaningful fashion unless the teacher draws upon clearly defined concepts of learning process and learning styles. Part of our task as principals, supervisors, consultants, instructional leaders is to help the teacher develop and draw upon these concepts.

REFERENCES

[1]Woodruff, Asahel. The Psychology of Teaching. New York: Longmans, Green and Co., 1951.

II. DECIDING ON CONTENT OR WHAT TO TEACH.....

One of the first questions to be answered when starting to teach concerns curriculum and the individual. Three critical concerns relate to choosing the content of the learning experience. These help you establish priorities to answer the question "What To Teach"?

Critical Concerns:

1. What the individual wants
2. What the individual needs
3. What the individual ought to have

These concerns are defined as follows:

Need - What an individual has to have to survive---These are basic or coping skills.
Want - Items that must be included to retain interest and participation.
Ought to Have - Items that improve the quality of learning. Generally these are subjective areas related to what should be mastered.

The Adult Performance Level (APL) Project, funded by the U.S. Office of Education in 1971, sought to identify the skills necessary for an adult to function successfully in today's society. As such, the APL Project is one approach to teaching the needs of adults. The project accomplished several major tasks. First it defined functional literacy in terms of five knowledge areas and four basic skill areas. The skills are taught and mastered as they apply to the knowledge areas. The five knowledge areas are Occupational Knowledge, Consumer and Economics, Health, Government and Law, and Community Resources. Basic skill areas include, Communication Skills, (reading, writing, speaking, listening, viewing), Computation, Problem-Solving, and Interpersonal relationships.

The project also demonstrated that large numbers of adults lack the competencies which are indicative of functional literacy as defined by the project. Finally, it developed a design for a curriculum to help adults acquire functional literacy. Each of the five knowledge areas begins with a general goal statement which is defined by a series of objectives (65 in all). These objectives are described by a series of sub-objectives and tasks which comprise the entire APL curriculum.

See Appendix B for a listing of the APL objectives. The chart that follows gives examples of skills applied to knowledge areas and shows the APL Matrix.

APL MODEL OF FUNCTIONAL COMPETENCY: EXAMPLES OF TASKS

	Consumer Economics	Occupational Knowledge	Health	Community Resources	Government and Law
Reading	read an ad for a sale	read a job description	read first aid directions	read a movie schedule	read about your rights after arrest
Writing	fill in income tax form	complete a job application	write a menu	complete an application for community service	write your congressman
Speaking, Listening, Viewing	ask question to IRS	listen to an employer talk about a job	listen to a doctor's directions	use the telephone	describe an accident
Problem-Solving	decide which house to rent	decide which job suits you	decide when to call a doctor	use stamp machines in the post office	decide which candidate to vote for
Interpersonal Relations	relate to a sales clerk	be successful in a job interview	interact with hospital personnel	ask directions	interact with police successfully
Computation	compute sales tax	calculate paycheck deductions	decide how many times a day to take a pill	calculate the time it takes to travel a distance	calculate the cost of a speeding ticket

III. Setting the Climate

One of the most critical factors in the adult classroom is the climate - or the general environment in which the learning is to take place. Adults who view school as an unpleasant place because of past experiences are especially sensitive to the atmosphere of the class - are they really welcome, or are they just tolerated. Helping students to relax and to feel as part of a group can be accomplished through a variety of ways. The following list of get acquainted ideas gives a sample of methods from which to choose. Some are elaborate, some are simple; the purpose is to stimulate ideas which you might find useful in the class.

Information on nonverbal communication is included at this point because it is such a major part of the classroom environment. Page 20 presents a brief overview of the importance of nonverbal communication. The two articles that follow, explore various aspects in more detail. You may find that some of the suggested nonverbal experiences found on pages 27 and 28 are very enlightening.

A Variety of Get-Acquainted Ideas

1. Partners in Introduction Interview (written or verbal)-each participant introduces partner.
2. Introduction Bingo--bingo cards with blank squares, first person to have card completed with signatures of others is winner
3. Personal article that represents individual--with what does person identify e.g. telephone, hair brush, etc. and why
4. 20 questions activity--ask questions to find out information about each person
5. Introduction/Listening Technique--self-introduction and feedback from listeners
6. Self-introduction
7. Ask names or nicknames
8. Tell your name & everyone's before you
9. Adjective that describes you and your name (i.e. happy Sue)
10. Draw a picture of what you like to do, pin it on yourself
11. Name tags
12. Blindfold - voice association
13. Get someone you don't know and find out their favorite food & hobby (or any number of things)
14. Introduce person on your right
15. Color coded groups
16. Shake hands with those around you
17. Equal numbers - men & women introduce member of opposite sex
18. Each person tell about his own family
19. Call each person's name and stand up (only after another activity)
20. Tell "native" home, school, etc.
21. Age groups i.e. those who are 29 ... 28 ... 27 stand up and introduce self
22. Adjective starting with same letter as name, i.e. Aggressive Amy
23. CB handle (real or made up)
24. Beans - each person start with 5 beans, identify other people by name If correct, get one bean, if incorrect give away one bean.
25. Favorite TV program--guess who likes what
26. What three adjectives would you most want to be remembered for?
27. "What's My line"--guess each person's occupation
28. Identification - Fruit or Affliction--Participants are to select either a fruit or affliction (i.e., broken leg, sore throat, etc) to describe who they are. For instance, someone might say that he is like a backache because although identified, he can never be removed. Each participant should select something he or she feels describes who they are.
29. Song--Select well known songs and substitute names for the subject of the song. For example: in the "Yellow Rose of Texas," substitute a person's name for "Texas" or "Rose." The objective here is to construct a humorous situation in which people learn names through the ridiculous.
30. Famous Person--Participants write out a famous name on a piece of paper and pin that paper on the back of someone else. No one is to see the name pinned on his/her own back. The object of this exercise is for each person to guess what famous name is pinned on his/her back. This is to be accomplished by asking any of the participants questions producing only yes or no answers.

31. Match Name--Hand out blank 3X5 cards. Instruct each person to print his or her name on the card. Collect each card, mix them and hand them back to the participants. Make sure no one has his or her own card. The object of this exercise is to locate and meet the person whose name is on the card. You may want to find one or two significant bits of information about this person to share with the entire group.
32. Statements Depicting Self--Each person is to write on a 3X5 card two or three statements about himself. The cards are then collected, mixed and returned to the participants being careful that no one receives his or her own card. The object of this game is to ascertain who someone is by matching the statements to the person. This will be accomplished as the participants informally interview one another in attempt to match the statements to the person.
33. Puzzle--On a large sheet on contruction paper, draw a puzzle with many pieces. Now, cut these pieces out and place in suitable container. Each person is to take one of the puzzle pieces and write his or her name on it. The object of this exercise is for everyone to work together as they assemble the puzzle. Should there be more blank pieces than people, each person might write his or her first name on one and last name on another. It would be better if all pieces had names on them but it is not absolutely necessary.
34. Scrambled Facts--Participants are to print on a 3X5 card two or three factual statements about themselves. Those cards are to be collected, mixed and handed back to the participants. No one is to receive his or her own card. The object of this exercise is for each participant to match the statements with the person. This is to be accomplished by informally going from one person to the next and asking whether or not these statements refer to that person.
35. Name Association--The purpose of this game is to determine a person's name by word association. Each person should think of a word which can serve as a clue to his or her name. For instance, if your name is Miller you might say "I'm a beer named _____." All the participants are to engage in dialogue attempting to discover other names as well as offering clues to thier own identity.

Reproduced from:
Relating to the Adult Student: Communication Skills. College Station, TX: Adult and Extension Education, Texas A&M University, 1977.

NONVERBAL COMMUNICATION

Messages in the human medium are received or communicated by two basic modes -- Verbal and Nonverbal, Research has shown the following breakdown by carrier:

Carrier	% of Message Carried
Verbal	7%
Vocal Characteristics	38%
Facial/Body Action	55%

Traditional learning styles have concentrated on the verbal carrier -- a minor 7% of all communication carriers. The area of nonverbal communication has received a lot of emphasis in recent years. Popular notions are capitalized on by many authors -- it is a lucrative, intriguing, and mystifying area of study. There appear to be two "basic" elements dividing up the nonverbal communication area. These are:

1. Personal elements -- Facial expressions, includes eye contact (must consider various cultural emphasis, de-emphasis on this however; eye-shift, etc.
   -Gestures, actions (connotes enthusiasm, dejection)
   -Postures, positions of the body
   -Vocal characteristics (people accept this mode if it is contrary to what verbal is saying)

2. Situational Elements --
   A. Time and use of time. There are different rhythms for different places. There is technical time, formal time and informal time.
   B. Use of Space Elements -- intimate domain is up to 18" between communicators.
      -Personal domain is from 18" up to 4' between communicators
      -Public domain is 12' more. (Many classrooms place the teacher desk about 12 ft. from students desks. This is representative of separation)
   C. Environmental Elements -- lighting, colors, decor all affect learners' perceptions.

Knowledge of these nonverbal elements and their possible impact on the learner is a prime responsibility of the effective teacher. Recognizing nonverbal cues relating to participation, boredom, anxiety also are key to successful communications.

NONVERBAL COMMUNICATION AND STUDENT INVOLVEMENT

by Russell L. French

Suddenly, "student involvement" is the name of the game. Students are demanding more involvement in educational decision-making. Critics of our schools are calling for more involvement of students in the teaching-learning process. The professional journals are calling for strategies to "increase motivation" and "facilitate student interest." We're concerned about "humaneness", relevance" and "shared responsibility" all of which seem to have something to do with "involvement"? Is it any wonder that most of us are "betwiched, bothered and bewildered?"

Whatever pressures have brought about the present emphasis on student involvement, it is, nevertheless, a real concern, and we are trying (Oh, how we're trying!) to increase student involvement in and out of the classroom. But a survey of the total situation suggests that in many cases we may be grasping at straws, manipulating the wrong variables, expending energy in the wrong places, wasting time in circuitous routes. Often, we may have overlooked a major ingredient in involvement - communication.

Most of what happens between and among people engaged in the educational process involves communication. Most of us are aware that decision-making and decision-implementation are dependent upon communication among the various parties involved, but we sometimes seem to forget that the teaching-learning process depends primarily on communication-interaction strategies for its success or failure. The stuff of learning for the growing child or adolescent includes interactions with parents, teachers, peers, experiences, books, media, animals--the world about him.

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THE IMPORTANCE OF NONVERBAL CUES

Communication has both verbal and nonverbal dimensions. Communication research suggests that the message received and interpreted by an individual, is largely a product of the nonverbal cues in the situation. Albert Mehrabian,[1] a noted psychologist, concludes that 93% of what we "learn" from the communication process is carried in the nonverbal cues. Other estimates range from 55% upward.

What then are these important nonverbal elements of communication as they pertain to education? Galloway,[2] French,[3] Hall,[4,5] Fast[6] and others suggest that there are both human and nonhuman elements. Human elements or carriers include

1) facial expression (also eye contact)
2) postures and positions of the body
3) actions and gestures
4) vocal characteristics (pitch, tone, volume, etc.).

Nonhuman carriers incorporate

5) utilization of time
6) utilization of space
7) Other environmental factors (light and dark, furnishings, color, general decor)

All of us have been vaguely aware of "messages" derived from the things which aren't said. Students today appear to be extremely sensitive to these nonverbal communications.

NONVERBAL FACTORS IN STUDENT INVOLVEMENT

Students now refuse to get "involved" when they read nonverbal cues which suggest to them teacher deception, lack of adult enthusiasm, and lack of concern for the individual. Most educators are of good intent. We don't intend to deceive, to demonstrate lack of enthusiasm or personal,

individual concern. However, students are telling us that these are things we are communicating. If we want students to become "involved" in school and in learning we must become more sensitive to nonverbal communication cues. Let me illustrate by means of a few of our findings over the past several years:

1) Teacher Posture or Body Position.

When presented with a sketch of a female figure with arms crossed over her chest, more than 40% of the learners interviewed (from kindergarten through college) told us this "old-maid school teacher" was unfriendly. When asked to articulate further, they indicated that this behavior had become so noticeable among female teachers that its occurence caused them to become attentive to the behavior and "tune-out" the verbal communication and lesson content.

2) Teacher Gestures and Actions

A number of students interviewed, tell us that their lack of enthusiasm for a given subject, teacher or class resulted from the lack of expressed enthusiasm on the part of the teacher. When asked how they judged teacher enthusiasm, these students mentioned lack of movement in the classroom, few expressive gestures, a "tired," colorless voice, and overall lack of energy expended.

3) Teacher and/or Administrator Vocal Characteristics

When asked to indicate those factors which suggest teacher or administrator lack of concern for the individual student, students mention most often vocal tone, pitch, and volume all demonstrating lack of warmth. Also mentioned often in this list is lack of eye contact when conversing one-to-one or in small groups.

4) Utilization of Time

A vast number of students today feel that we are hypocrites. They perceive us saying and doing opposite things. We talk about persons in our society becoming self-evaluative and self-directive. Yet we seldom give time in school to activities involving self-evaluation and self direction. For example, several students have reminded us that few teachers or administrators allow students to "grade" their own work, derive their own "grades" or evaluate their own progress (with guidance, of course). Apparently, students hear what we say, then look closely at the ways in which we use the time available. They take their cues from the latter.

5) Utilization of Space

A remark made over and over by students in schools which have experienced unrest, demonstrations, and the like has been, "I'm tired of people telling me they care from a distance." Although these individuals have seldom been able to fully articulate what they mean in this statement, one explanation is offered by Edward Hall's[5] work in spatial distance. Hall describes four domains of spatial distance to which human beings relate in varying ways. The fourth domain, involving distances of twelve feet and more; Hall terms the "public domain." Human beings, at least in our conglomerate culture, perceive little warmth, individual attention or personal consideration when trying to communicate with other persons from distances of twelve feet and beyond. They feel separated. Most traditionally arranged classrooms prescribe a separation of twelve or more feet between the teacher and most students. Perhaps, the distance did not seem as great to students of the past, but in today's speeding, temporary society as described by Toffler[7], young people find it difficult to satisfy the need for intimacy with a few other human beings. They are bringing the need to school.

Even administrators aren't exempt from student concern in this area. Many students perceive the principal as separated by great distance, a maze of secretaries, desks, and physical objects. He is a man who gets close only when he's got a gripe or when you are in trouble.

6) Other Environmental Factors.

On the whole, schools (except for a few very new ones) are dark and dreary places. Perhaps, we will soon run out of army surplus green paint and try for variety of color to fit emotional needs. Perhaps, we will become more and more aware of the communicative benefits of good lighting. Perhaps we will begin to look at our own homes (or anybody's home) and note the differing effects of "institutional" decor and "homey" decor on our senses. Someday, we might even notice that the vast majority of cocktail lounges in this country are far more inviting places for communication than the vast majority of our schools, even when we disregard the "curriculum" served in either establishment. The fact is, students don't like school, often because they don't like the physical plant.

The situations and findings presented here are a few of many, but they should be sufficient to underscore the fact that nonverbal communicative factors are crucial to student involvement.

A NOTE ON STUDENT NONVERBAL CUES

Most of this exposition has been devoted to a concern for what we communicate to students. We can't forget that students are also communicating to us. As this author has pointed our elsewhere , we teach children very early in the educational game that they are not supposed to verbalize (talk about) the things which really matter to them--feelings, emotions, personal problems. All of us learn that verbal expressions of these types aren't appropriate in school or other institutional settings. What meaning does this fact give to the issue of student involvement?

If we are really interested in involving anyone in anything, it is necessary that we perceive him as an individual, that we "hear" and "see" what he is telling us without words. To know the student's personal needs, anxieties, level of involvement or his disinterest, we must look to his nonverbal behaviors. These provide the key to knowing the individual and involving him as an individual in the teaching-learning process. Communication is a two-way street.

REFERENCES

1. Mehrabian, Albert. "Communication Without Words," Psychology Today, September, 1968.

2. Galloway, Charles M. Teaching Is Communicating. Bulletin of The Association for Teacher Education: Washington D.C. 1970.

3. French, Russell L. and Charles M. Galloway. "A Description of Teacher Behavior: Verbal and Nonverbal," Research In Education (Abstract), November, 1970.

4. Hall, Edward T. The Silent Language. New York: Fawcett Publications, 1959.

5. Hall, Edward T. The Hidden Dimension. Garden City, New York: Doubleday, 1966.

6. Fast, Julius. Body Language. New York: Pocket Books, 1971.

7. Toffler, Alvin. Future Shock. New York: Random House, 1970

8. French, Russell L. "Individualizing Classroom Communications," Educational Leadership, November, 1970.

EXPERIENCES IN NONVERBAL COMMUNICATION

1) During a conversation with a professional superordinate, subordinate or peer attempt to communicate to him/her at least one of the following ideas/feelings without verbalizing it: (Make particular use of body posture and spacial distance.)

   a. Your superiority

   b. Your inferiority

   c. Your rejection of his/her ideas

   d. Your support of him/her

2) During an encounter with a member of the opposite sex (other than your husband or wife), try responding to him/her nonverbally in ways which you consider opposite of his/her expectations. Notice the reactions. After the experiment, discuss it with the other person.

3) Identify at least two persons with ethnic and/or cultural backgrounds different from your own. Observe them carefully during their conversations with others or with you. Take note of their nonverbal behaviors, particularly as these may differ from your expectations of the situation at hand.

4) Enter a classroom which is not in use and reorient the furniture. For example, you might place the chairs in a large circle or small groups, or you might move the podium to the other end of the room and turn the chairs around to face it. Try to be near the room when the next class meets to observe what happens and/or go back after the next class meeting to observe changes of your changes.

5) Ride an elevator. If there are others aboard try to make conversation, establish eye contact, move to a location nearer another individual than "normal." Notice the reactions of the other riders. If you are brave enough, try some pattern of unique behavior such as one of the following:

   a. Wait until the elevator empties, then sit down in the middle of the floor. Watch people's reactions as they prepare to enter the elevator.

   b. Comment on a woman's perfume, the texture of someone's coat, the shade of lipstick someone is wearing, the pattern in a man's tie or some other personal element of another rider. Note the reactions.

c. Ask a group of fellow riders to sing with you to "shorten the trip." Note the reactions.

6. Pretend that you are someone very important (a dignitary, public personality, movie star, etc.). Decide what clothing, mannerisms and nonverbal patterns will communicate your importance to others. Practice these patterns several times before a mirror. Then enter the world at large (particularly a place where there are several people who don't know you) try out your new image and observe the reactions. After your trial, discuss with one or more of those present, their reactions and feelings.

7. At lunch time, sit at a table with people you do not know. Spread your food and utensils far enough away from you to be "too close" to other persons at the table. Chat if you wish.

8. Prepare a placard which announces that you are running for public office. Introduce yourself to people you pass on the sidewalk and ask for their vote.

After you have completed each of the activities, take a few minutes to put your observations, feelings, reactions on paper. These notes will serve as references later when you undertake other activities.

NONVERBAL COMMUNICATION IN THE ABE CLASSROOM

by Russell L. French and John M Peters*

SOME FALSE ASSUMPTIONS ABOUT TEACHING

Those who teach at any level usually embark upon that venture harboring several inadequate assumptions about the nature of teaching and the outcomes of the teaching act. The pressures and realities of the classroom soon jolt most of us into examination of some of these previously hidden assumptions.

For example, most teachers enter their first classrooms assuming that teaching and learning are synonomous processes, that teaching automatically results in learning. Within a few days or weeks, the new teacher realizes that teaching is one process, learning another. In my role as teacher, I can control the teaching/instruction process, but learning is a process which occurs in the learner. Learning may have relationship to what I do instructionally, but there are many variables which influence or become part of learning, and ultimately, I as teacher cannot control the learning process.

Some of the assumptions which teachers harbor are more elusive than that just defined. To examine them or even articulate them requires more experience, a more conscious attempt to study the process of teaching and learning and the interactions of the classroom.

For instance, many teachers spend much of their careers assuming that to teach is to communicate. Actually, many persons go through life assuming that whatever they say in professional and social situations is received and interpreted as they intended by those who receive the message. We who teach are no different from

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others. But communication is at best a complex process. Most communication experts agree with Wilbur Schramm[1] that communication is composed of (1) a sender and (2) a receiver who both act in multidimensional roles as encoders, interpreters and decoders, (3) one or more messages and (4) one or more channels through which those messages are sent.

In its simplest form, Schramm's model of communication approximates Figure 1.

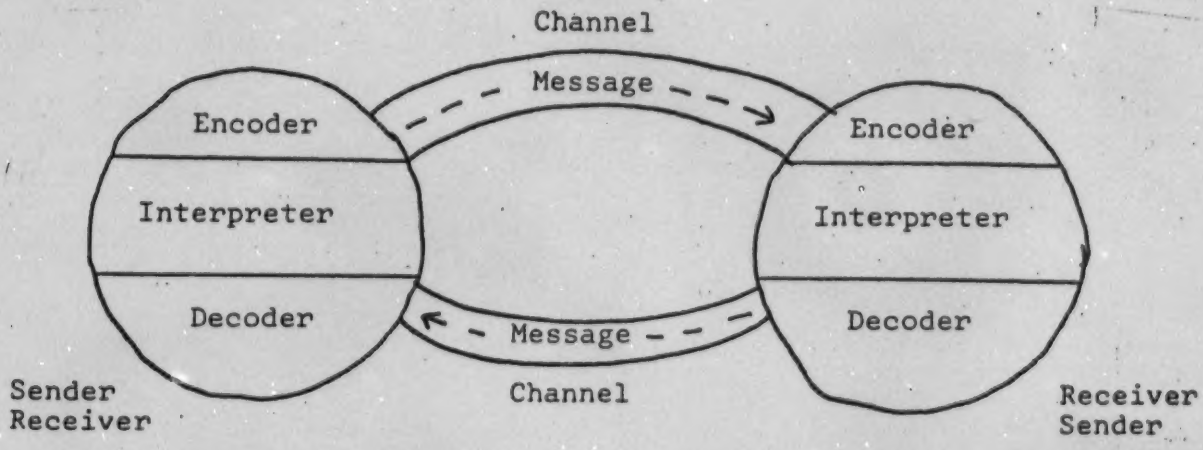


FIGURE I. SCHRAMM'S MODEL OF COMMUNICATION

To have complete communication, all aspects of the process must be functioning together. All gates must be open. All participants must be on the same "wave length." The possibilities for distortion, misunderstanding, breakdown in the process are enormous. To talk or to teach or to listen do not necessarily result in communication. In fact, one wonders how any real communication between <u>two</u> people is ever accomplished to say nothing of the classroom situation where a teacher is trying to communicate with fifteen, twenty or more individuals simultaneously.

Inherent in previous assumptions about teaching and communication is yet another assumption even more insidious. Many of us have spent many teaching hours assuming that <u>to teach is to send</u>

messages. Is it not the teacher's job to teach? Doesn't that mean that the teacher is primarily a sender of messages? Have you ever found yourself (as teacher) in the midst of a lesson or discussion with students when suddenly everyone stopped talking? Suddenly, you realized that everyone was quiet. What happened after that? What thoughts went through your mind? Were they something like this:

> Oh! It's quiet...Why doesn't somebody say something?...Somebody should say something. I guess that means me. I'm the teacher.

But is the teacher's primary task to send messages? Is that what it means to teach? Somehow we have neglected the teacher's role as a receiver of messages. Sometimes we forget that it is impossible to meet the needs of students, children and adults alike, unless we know what those needs are. How do we learn about a student's needs? S(he) must communicate them to us, and we must receive the message.

There is much talk currently about "individualizing" instruction and "personalizing" teaching, and there are many technologically-oriented suggestions for achieving these ends. However, the truth is that no individualization or personalization is possible unless I first know and understand what the learner is "telling" me about his interests, needs, concerns, commitments, anxieties and knowledge. And I need to be aware that much of what the learner is telling me of importance, s(he) is telling me without words.

This last point leads to examination of yet another false assumption about teaching. Many teachers seem to assume that to teach is to be verbal. We see an example of this assumption in action in the earlier illustration of some of our thoughts when the

classroom becomes silent. Inherent in those thoughts are the notions that silence is unprofitable, that silence indicates lack of learning and teaching and that silence signifies a lack of communication. But none of these notions are necessarily true.

Silence is a powerful teaching and learning tool. It is necessary to critical thinking. Its presence may signify great mental activity. Have you ever tried to answer someone's penetrating, thought-provoking question without opportunity first to think?

Periods of silence in a classroom or social situation are not times devoid of communication, for communication is not entirely verbal. While two people can be face-to-face for relatively long periods of time without talking to each other, nonverbal communication will not cease. Our postures, positions, movements, facial expressions and spatial relationships carry on communication without words.

We have come to rely so heavily on the spoken word as the medium of teaching and learning that we often ignore the nonverbal elements of human communication. Yet communication researchers tell us that more than 50 percent of what we receive in communication with others comes from the nonverbal. For instance, Albert Mehrabian[2] suggests that as much as 93 percent of what gets communicated is nonverbal in nature. The implications of these findings for those of us who teach are powerful. First, we must realize that we are sending many more (and perhaps quite different) messages than we ever imagined. Second, we must be sensitive to the nonverbal messages which our students are sending us. In our role as receivers of messages, we miss the boat if we assume that the

student will verbalize to us those things of most importance to him or her.

After spending only a short while in the institutions called schools, all of us learn something about institutional expectations - about what is deemed "appropriate" and "inappropriate" content of communication. Most children learn very quickly that talk about reading, writing and arithmetic is "appropriate" in school, but talk about the warm feeling I get when I sit on my mother's lap, how much I like the smell of cookies freshly baked, or how it hurts to have my boyfriend say, "it's over" is "inappropriate" in school. Yet, we must communicate our feelings, attitudes and needs - the things which really matter - because we are human. We do this without words.

To teach is more than sending verbal messages. To teach is to be aware of what I'm communicating to others and what they are saying to me - often without words. To teach is to be sensitive to how this communication takes place. To teach is to search for blocks to communication between my students and me. To teach is to recognize that we cannot teach content until we can reach the student, know him, understand him, communicate with him.

THE NATURE OF NONVERBAL COMMUNICATION

As already indicated, communication is a complex process. It contains both verbal and nonverbal elements. While educators have been primarily dependent upon verbal communication to carry on the business of teaching and learning, it is essential that greater attention be given to nonverbal communication in the classroom. Those who have studied human communication from a variety of per-

spectives - psychology, sociology, anthropology, speech - agree that more than 65% of whatever messages are sent and received can be attributed to nonverbal cues. The language of the nonverbal is dominant in our interactions with each other.

What then are these important nonverbal elements of communication as they pertain to teacher-student interactions? Galloway[3], French[4], Hall[5,6], Fast[7], and others suggest that there are both human and situational elements. Human elements or carriers include:

1) facial expression (including eye contact)
2) postures and positions of the body
3) actions and gestures
4) vocal characteristics (pitch, tone, volume, etc.)

Situational elements incorporate

5) utilization of time
6) utilization of space
7) other environmental factors (light and dark, furnishings, color, general decor)

All of us have been vaguely aware of "messages" derived from what wasn't said, but our threshold awareness of the nonverbal may not have been great enough to allow conscious examination of classroom communication practices. While they may not be able to articulate their insights, students of all ages now appear to be extremely sensitive to nonverbal communications. Adult basic learners are even more sensitive and perceptive than others due to several factors including (1) their ages and experiences in communication settings other than the classroom, (2) their anxieties

regarding a return to the classroom, (3) their limited verbal skills which force reliance on nonverbal cues, and (4) their past experiences in the classroom.

To what cues specifically are learners sensitive? How does nonverbal communication work? Some illustrations are provided below:

1) Facial Expression

One important aspect of facial communication is eye contact (or the lack of it). When talking to students individually or in small groups (3-5 persons), teachers generally assume that students who "like school," "like the teacher," are "motivated, interested concerned" will demonstrate these positive attributes by "looking at me (the teacher) when I talk to you." Lack of student eye contact in these classroom situations is often unthinkingly assessed as lack of motivation, concern, and positive affect toward teacher or school. In truth, however, no such conclusion can be reached on the basis of eye contact data alone.

There are many cross-cultural differences in nonverbal communication. North American Indian children (and many adults) often look away from the eyes and faces of those with whom they are interacting because of tribal tradition and mythology which stressed that "to look into a man's eyes is to steal his soul." Appalachian youngsters and adults often look away because they have learned to show deference to authority. Some black youngsters and adults may not look at teachers or other authority figures because the pressures of

poverty, discrimination, and large families have seriously limited their experiences with positive one-to-one, adult/child interactions during early childhood. As teachers, we are constantly interpreting and misinterpreting what students are saying to us with their eyes.

On the other hand, students knowingly and unknowingly read teachers eyes, too. Our "dirty" looks and glances of approval are both well known to those we instruct.

During some studies a few years ago in a large metropolitan school system, we asked teachers and administrators in one large high school to identify for us students who were potential drop-outs. Among those easily identified were four sophomores (three boys and one girl, two black and two white youngsters) who were assigned to the same classes throughout the school day. We followed these young people for ten consecutive days. We sat in each of their classes, followed them through the halls, watched them in the lunchroom. During these ten days of observation, not one adult-teacher or administrator ever looked directly at any of these four students. For six or seven hours a day, day-after-day, these young people were visually ignored by the adults around them. Obviously, these students were already labeled as "losers". They did not contribute in class. They kept quietly to themselves. They did not create overt problems calling for punishment. It no longer seemed odd to us that they had been so easily identified as potential drop-outs.

If these students did drop-out of high school, where are they now? Have some of them returned to ABE classrooms to complete their basic education? What are they looking for in the faces and eyes of their ABE teachers?

Are their nonverbal experiences in ABE classrooms different from what they encountered in their elementary, junior high and early high school years?

2) Postures and Positions of the Body

When presented with a sketch of a female figure with arms crossed over her chest, more than forty (40) percent of the students interviewed (kindergarten through adult) told us that this "old-maid school teacher" was unfriendly. When asked to explain further, they indicated that this behavior had become so noticeable among female teachers that its occurence caused them to become attentive to the behavior and "tune-out" verbal communication and lesson content. Some learners interviewed were unaffected by this body position. The message to be considered is not the "appropriateness" or "inappropriateness" of the "old-maid school teacher stance." Rather, as teachers, we must gather feedback from students regarding our nonverbal cues. If we find that some particular nonverbal behavior is inhibiting or distorting communication, we must take the steps necessary to correct the situation. If desired communication in a particular class or group is not affected by my behaviors, I need not worry about changing them.

The postures and positions students present to us tell us something, too. But sometimes we don't receive the message.

While doing some research a few years ago, we placed a still camera with automatic exposure in several classrooms. Usually, we allowed the empty camera to click away for several days before loading it with film so that students and teachers would lose some of their consciousness of its presence. When we did load the camera with film, it provided us with a snapshot of classroom behavior every forty-five seconds.

In one fifty-minute senior high school social studies class, the sixty-five or so pictures we developed provided interesting commentary on student interest. We had the camera focused on most but not all students in the class. At the beginning of the class period, students were sitting more or less upright. As the class period and pictures progressed, more than half of the students in view slid lower and lower in their seats. The last few snapshots showed many students slumped so far down behind their desks that they could scarcely see over the desk tops. Yet the teacher had continued with his lecture from beginning to end of the class period. Either he did not see what his students were telling him, or he chose to ignore it.

3) Gestures and Actions

A number of students of all ages we have interviewed, tell us that their lack of enthusiasm for a given subject, teacher or school itself results from the lack of expressed enthusiasm on the part of teachers. When asked how they judged teacher enthusiasm, these students mentioned lack of movement in the classroom, few expressive gestures, a "tired,"

colorless voice and overall lack of energy expended. In short, students seem to be saying that they can't become enthusiastic about something for which the teacher demonstrates no enthusiasm. They look for their cues to teacher enthusiasm in the nonverbal performance rather than the verbal one.

At first glance, this discussion might seem more appropriate to teachers of elementary age youngsters or adolescents than to teachers of adults. However, adults are merely children grown tall where communication is concerned. All of us are unwilling to spend much time with a communicator who is impersonal, colorless, bored or unenthusiastic. Further, those of us who teach in adult basic education classrooms are confronted with a unique situation. First, we must remember that many of the students we teach left the public schools at some time for some reason. Could the nonverbal communications they experienced have played some part in their exit? If so, these returnees will be sensitive to similar nonverbal patterns should they be exhibited again.

Second, many adult students have greater anxieties in the classroom than average elementary or adolescent learners. Teacher communication patterns can be one tool for overcoming these anxieties.

Third, adult learners are not a captive audience. There are no laws requiring their presence in the classroom. Unless the adult learner is excited about his learning experience,

happy in his interactions and comfortable with those who teach him, he may not stay long.

Finally, many adult basic education classes are taught at night by individuals who have already spent a full day teaching in elementary or secondary classrooms. Teachers become tired, too. When we are tired, our enthusiasm wanes. Our gestures and actions are fewer and less powerful. Our movement in the classroom is more restricted. Our faces and voices lack life. ABE teachers in situations like this may be less communicative and less effective than they know.

4) Vocal Characteristics

"John, you did an excellent job on that assignment." The words suggest positive reinforcement, praise, encouragement. But we can't really tell until we hear them spoken. The teacher's tone of voice or pitch can convey a far different message. "It's not what you say, but how you say it that counts." We have all heard that statement before, and often it is only too true.

When words and vocal characteristics carry different meanings, the result is a "mixed message". Sometimes a message can have three or four levels of meaning, if words, vocal characteristics, facial expression, and gestures appear incongruent to the receiver. Most researchers and communication experts agree that the greatest problems in human communication result from these incongruencies.

Those nonverbal elements labeled as situational in nature are not independent of human beings, but rather are the result

of interaction between human beings and other factors in their immediate environments. Illustrations of these interactions include the following:

5) Use of Time

Time talks! Have you ever had the experience of traveling or moving to a region of the country other than the one with which you are most familiar only to find yourself reacting upon arrival to how "fast" or "slow" people and events move? While time is measured in the same fashion throughout the United States, human beings internalize time in the form of body rhythm, pattern, rate, and sequence of movement, rhythm and rate of speech and structuring of communication events. Social, cultural and ethnic backgrounds and even weather and climate conditions influence this process. The result is a utilization of time which influences communication, particularly when the participants come from different backgrounds, regions and/or social conditions.

Participants in any given classroom may be operating on very different psychological or sociological dimensions of time. Hall[5] suggests that scheduled time in our culture can be interpreted formally, informally or technically depending upon the situation, institution and/or the participants. Persons involved in launching a rocket to the moon must operate in the technical dimension of time -- specificity to a tenth or hundredth of a second. Schools and school days are usually organized on formal time. The day begins at 8:00 A.M. The first class begins at 8:15 and ends at 8:55. There are five minutes of "passing" time between each class period. But on

an inservice or professional growth day, teachers tend to relax a bit from routine.

One superintendent we knew sent a memorandum to teachers announcing the beginning of the inservice program for 8:30 A.M. He was operating on formal time. When teachers received the memo they interpreted it to mean that the program would begin "about" 8:30 A.M. They were operating on informal time on their "day off" from routine. Many teachers arrived late. The superintendent was angry. Neither party fully understood what had gone wrong, but communication was blocked.

Students bring differing time perspectives to the classroom. Adult students may be even more divergent in this area than elementary or secondary school pupils, for the adult student has spent many hours today operating in other time frames -- the job, the parent role, the neighborhood. How we organize and use time in the adult classroom must take these differences and uniquenesses into account.

It is also important to note that a vast number of students today feel that teachers and administrators are hypocrites. They perceive us <u>saying</u> and <u>doing</u> opposite things. We talk about persons in our society becoming self-evaluative and self-directive. For example, several students have reminded us that few teachers allow students (even adult students) to "grade" their own work or evaluate their own progress (with guidance, of course). Apparently students hear what we say, then look closely at the ways in which we use the time available. They take their cues from the latter.

6) Use of Space

A remark made over and over by adolescents in schools which have experienced unrest and demonstrations has been, "I'm tired of people telling me they care from a distance." Although these individuals have been unable to fully articulate what they mean with this statement, an explanation is offered by Edward Hall's[6] work in proxemics (spatial relationships). Hall describes four domains of space in which human beings (at least in our culture) relate in varying ways. The fourth domain, involving distances of twelve feet and more, Hall terms the "public domain." Human beings, at least in our swift-moving, conglomerate culture perceive little warmth, individual attention or personal consideration when trying to communicate with other persons from distances of twelve feet and beyond. They feel separated. Most traditionally arranged classrooms prescribe a separation of twelve feet or more between the teacher and most students. Perhaps that distance did not seem as great to students of the past, but in today's speeding, temporary society as described by Toffler[8], young people find it difficult to satisfy the need for intimacy with a few other human beings. They have been bringing the need to school.

Again, we are reminded that many adult students dropped out of school somewhere along the way. Did it occur in part because these needs were not met, because they felt separated, cut off? Are they still searching this second time around?

Further, we need to remember that adult students spend most of their day in settings different from the classroom,

settings more informal, maybe more "comfortable". Our arrangement of space and our spatial relationships with these learners may be terribly important.

7) Other Environmental Factors

On the whole, schools are dark and dreary places. Color, lighting furnishings and general decor are not conducive to personal, positive communication. Few schools resemble homes in any way. Adult students are often uncomfortable in the "institutional" setting of the school. They aren't used to it. It is not a substantial part of their daily lives. They find it difficult to become oblivious to the setting. Even the furniture is wrong. It is uncomfortable after a long day. It doesn't fit. (Did you ever watch a 240 pound man try to slide into an arm-chair desk meant for a tenth grader?)

Settings for adult classes don't have to be this way. A little imagination, reorganization, paint, and odds and ends will go far toward changing the environment. If all else fails, move out of the school building. Community centers, homes, and churches offer alternative environments and new influences on communication. In many communities, adult learning centers have been established. Their purposes are many, but they offer much in nonverbal communication.

THE UNIQUENESS OF NONVERBAL COMMUNICATION IN THE ADULT CLASSROOM

Throughout this chapter, we have tried to focus attention on special problems and uniquenesses of nonverbal communication in the adult classroom. Some of the points presented are worth reiteration and expansion:

1. Adult learners usually are older and more experienced in a variety of communication settings than their counterparts in public schools. This may make them more sensitive to nonverbal cues.

2. Many adult learners (particularly in ABE classrooms) have dropped out of school during adolescence. Their return to the classroom brings anxiety which may make them supersensitive to negative nonverbal cues or incongruitybetween verbal and nonverbal messages.

3. Some (perhaps many) adult learners may have left the educational process because they perceived negative messages ("They don't like me. They think I'm no good.") in the nonverbal behaviors of teachers, administrators and other students. If this is so, they are still looking for those messages when they return.

4. Many adult learners have limited verbal skills. Research tells us that the receiver of communication in this situation turns to nonverbal cues in an attempt to gain understanding of the communication of which he is a part.

5. Teachers of adult learners often undertake their task in the late afternoon or evening hours, when both teachers and learners are fatigued. Teacher enthusiasm portrayed nonverbally becomes very important in these situations.

6. Adult learners are not a captive audience. Unless communication, verbal and nonverbal, is stimulating, rewarding, fruitful, even exciting, they may not return.

7. Most schools and classrooms do not provide appropriate nonverbal environments for adult learners. They need to be modified or left behind. Furniture, color, decor, lighting are more than aesthetically pleasing or displeasing. They become major factors in communication.

8. Adult learners are far from a homogeneous group. They bring many different backgrounds, environments, and experiences to a single class. Teacher nonverbal patterns speak dif-

ferently to many individuals, and in turn, the nonverbal patterns of these learners may be badly misread by the teacher.

Finally, we must remember that the adult learner is different from either an elementary school pupil or a typical high school student. The differences call for different patterns of communication, verbal and nonverbal. Fowler[9] found that teachers who taught in elementary or secondary classrooms during the day and adult classrooms in the evening did not vary their verbal and nonverbal patterns significantly between the two settings. Have we given sufficient attention to communication with adult learners? More than half of all human communication is nonverbal. What are you saying to your students? What are they saying to you?

REFERENCES

[1]Schramm, Wilbur. "How Communication Works," Communication Concepts and Processes. (Edited by Joseph Devito) Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971, pp. 12-21.

[2]Mehrabian, Albert. Silent Messages. Belmont, California: Wadsworth Publishing Company, Inc., 1971.

[3]Galloway, Charles M. Teaching is Communicating. Bulletin of the Association for Teacher Education. Washington, D.C., 1970.

[4]French, Russell L. "Nonverbal Communication and Student Involvement," Tennessee Education.

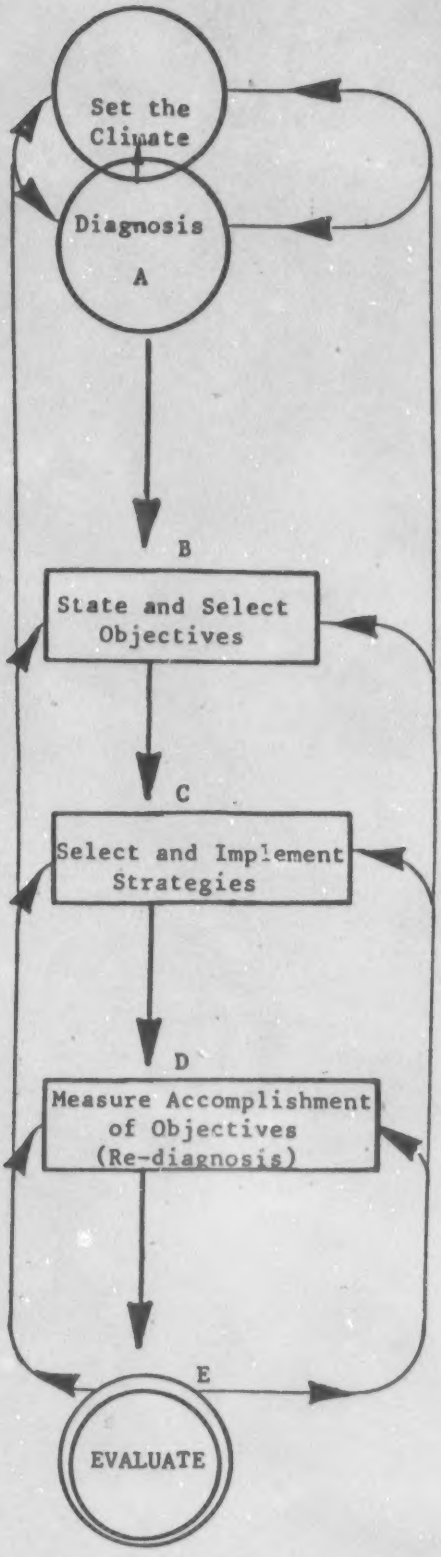
[5]Hall, Edward T. The Silent Language. New York: Fawcett Publications, 1959.

[6]Hall, Edward T. The Hidden Dimension, Garden City, New York: Doubleday, 1966.

[7]Fast, Julius. Body Language. New York: Pocket Books, 1971.

[8]Toffler, Alvin. Future Shock. New York: Random House, 1970.

[9]Fowler, William R. Comparative Analyses of Teacher Verbal and Nonverbal Behavior in Public School and Adult Basic Education Classrooms. Unpublished Dissertation. The University of Tennessee, Knoxville, 1972.



Instructional Model

A. Where am I? Diagnosis/Assessment stage. To assess the learners' strengths and weaknesses.

B. Where Am I Going? This stage states the intent of educational experience by selecting objective--identifying the affective objectives and specifying higher levels of thought in the cognitive/psychomotor areas.

C. How Will I Get There? When selecting various strategies, alternative methods and learning techniques, and resources to be used, you must identify significant student differences so as to be effective.

D. How Will I Know When I Have Gotten There? This is nothing more than an accounting process. Progressive judgement (evaluation) is not required. It compares product to established standards of validity (accuracy) and reliability (consistency).

E. How Well Did I Do? Evaluation of the total outcome through progressive jdugement values comparing product to established standards. You must also consider the validity of decisions made at other stages in the model.

A. WHERE AM I?

ASSESSMENT

Assessment can be defined as a system that enables the teacher to identify abilities, skills, knowledges, values, and beliefs of the student. Assessment functions include identification, placement, diagnosis, and problem solving. In addition to formal testing, a comprehensive assessment system might include informal measurement, interviews, and observation. Each method has both strengths and weaknesses. The best systems are those that incorporate multi-method approaches to assessment.

Preassessment should be practical. Student needs, time restraints for both student and teacher, and content relevance should be considered when deciding how much assessment is necessary.

Assess so that:

1. The student and teacher can learn something meaningful about the person.
2. Individualized instruction can progress.
3. Invalid assumptions about the student's ability are not made.
4. The student does not become bored with the program.
5. The student does not become frustrated with the program.

There are four different materials included here pertaining to assessment.

1. The Overview of Assessment Techniques Chart reviews various methods, defines them and discusses advantages and limitations.
2. "Informal Assessment" (one of the methods shown on the techniques chart) presents examples of informal methods you can use.
3. "Assessment Instruments" article discusses available methods and reviews some of the sources where these instruments can be found.
4. "Setting Up the System" discusses formats and actually takes you through sample instruments.

OVERVIEW OF ASSESSMENT TECHNIQUES

METHOD	DEFINITIONS	ADVANTAGES	LIMITATIONS
Existing available information	Records or reports that might be available from other sources.	Provides clues to potential trouble spots. Usually of concern to and easily understood by most individuals. Provides a "point of departure" for additional assessment.	May not show causes of problems or possible solutions. May not reflect current situation, recent changes. Information may be "spotty" or inconclusive.
Observation	Direct noting of data (events and behaviors).	Student is unaware of assessment being conducted. Source of continuous information. Avoids threatening "test" situation.	May be subject to "wrong" interpretation. Subject to observer's biases.
Formal Measures	Systematically constructed instruments; content, administration and scoring are "standardized" through application of statistical procedures.	Norms to "hold up" as a frame of reference. Offers comparative information. Supposedly prepared by experts in the field. Results easy to compute, compare and report.	Comparisons made to norms may lack meaning for individual. Test may not measure student objectives, may be time consuming costly, culturally restricting. Rigid procedures may require special skills for administering scoring and interpreting. Such instruments often don't provide for diagnosis-offer only a gross measure.
Informal Measures	Less rigid format leaves content, scoring and administration procedures to the discretion of the teacher.	Materials constructed and used for instructional purposes can be used also for evaluation. Ease of administration provides less threatening environment for evaluation than formal tests. Adaptability for special purposes. Readily available results may be easily interpreted by student as well as teacher. Assesses mastery of skills specific to student's objectives or goals.	Unreliable for making group comparisons. Quality limited by skills of creator. May make no provisions for diagnosis. Scoring procedures may result in getting feedback to learner too slowly. Measure objectives of a limited educational setting
Interview/ Discussion	Oral interaction to obtain pertinent information.	Reveals feelings, causes, and possible solutions of problems as well as facts. Affords maximum opportunity for free expression of opinion, giving of suggestions. Creates unrestrictive diagnostic environment - addresses areas of concern to learner. Generally non-threatening.	Is time-consuming, so can reach relatively few people. "Ties up" assessor's time. Results may be difficult to quantify. Can make subject feel he is "on the spot."

Informal Assessment as a Tool for the Adult Educator

by Mark Kellar and Waynne B. James

A Practical Problem

. Mention the word "assessment" to the typical university professor of education and chances are he or she will probably begin a discourse on reliability coefficients, standardized norm groups, or Kuder-Richardson formulas for internal consistency. On the other hand, ABE teachers are usually more interested in the practical dimensions of assessment. How much time will this type of assessment take? Is there enough money in the budget to pay for the service? How relevant is the information gained to the needs of the student?

While the purpose of this article is certainly not to diminish the importance of scientific accuracy in the field of ABE assessment, it is crucial to note that if a system is not practical it will not be used. Preferred assessment is probably a balance between sound validity and practical utility. When both elements are achieved the results can be an effective, quality ABE progrm.

Unfortunately many professionals attempt to superimpose the public school model of assessment on ABE situations. The adult educator cannot assume that a rigid time schedule for classes will be followed, that qualified counselors will be on duty, or that group tests for each grade level will be administered on "Thursday morning in the cafeteria." Often ABE classes meet in fire stations, libraries, or learning centers. Students may range from nonreaders to very bright GED candidates. Attendance is commonly sporadic at best and no "truant officers" enocourage learner participation. If a teacher did attempt to assess learner ability by administering a three and one half hour standardized form of the "West Dakota Test of Lunacy" a good three-fourths of the students would probably never return to class.

The ABE teacher must find or develop assessment techniques and instruments that offer the kind of flexibility needed in real life ABE situations. Time constraints are of utmost importance. The students' time is often limited so assessment administration should be quick and to the point. Most ABE teachers are employed part time; therefore scoring, analysis, interpretation and recording times must also be kept within reason. Cost should be considered as should the appropriateness of the instrument for the examinee. In addition to these requirements the assessment should meet a quality scientific criteria of reliability, internal validity, external validity, and objectivity (Stufflebeam, 1971).

A number of good standardized achievement, diagnostic, placement and intelligence instruments are suitable for ABE use. The most appropriate are described and compared by Vonderhaar, Mocker, Leibert, and Maass (1975), and Smith (1970). However, as mentioned earlier, standardized tests are not always appropriate to a specific ABE situation. Further, a preferred assessment system should not be limited to a few formal tests. Multimethod assessment approaches including informal techniques will add to the credibility of an assessment system.

A Partial Solution

As a technique, informal measures offer some definite advantages for the ABE teacher. Many materials can be used for instructional purposes as well as for assessment. Informal measures can be adapted more easily than can standardized measures. The casual nature of informal assessment diminishes the amount of test anxiety produced. Techniques may be modified for special or unique situations. Results are readily available for immediate interpretation by both the teacher and the student. In general, informal assessment techniques provide the ABE teacher with flexible tools that are absolutely crucial in the field.

Informal measures have obvious limitations, the most notable of which is their frequent failure to meet rigorous scientific standards. Misinformation may be worse than no information at all. However, If the practitioner views assessment as an on-going, dynamic process any decision is relative to the available information and can be modified, expanded or reduced as new, appropriate data becomes available. In other words, based on whatever knowledge is available. Therefore, informal placement and diagnostic measures can and should be taken both to collect initial informaton about the student and to supplement existing data.

Some Examples

One of the easiest and most effective ways to accomplish initial placement is to let the student share in the decision process. This can be done by having a variety of reading materials representing all levels available. The learner can browse through the sections and make his or her choice. Usually adults will choose materials that are "on level"; however, one should be aware that the content interest of selections and peer pressures may influence individuals to choose inappropriate material.

The Cloze Procedure (Bormuth, 1969) (James, Peters, Roberts, French, 1974) is one technique that has proven successful in placing students in appropriate reading levels. To prepare for the process the teacher selects passages from available worktexts and omits selected words at specific intervals such as the fifth or tenth words. The teacher then prepares an answer list of deleted words, numbered according to deleted spaces. Next, the student supplies the missing words to the best of his ability. Scores are tabulated according to the percentage of correct responses and the student's reading level is assessed as instructional, independent or frustration. About 40% to 50% correct responses equals an instructional level while over 50% equals an independent level and below 40% represents a frustration level.

Those who teach English as a Second Language (ESL) are often perplexed by the lack of suitable placement instruments. The Verbal Picture Analysis (Holder, 1976) enables the imaginative teacher to use photography from newspapers or magazines to determine a learner's verbalization level. Students react to pictures and their response characteristics are analyzed so that the individual can be placed in one of five categories.

Some authorities (Rakes - 1971, Kennedy -1971, Stanley - 1978) have developed quick reading assessments or graded paragraphs. Generally speaking, these approaches require the student to read a paragraph orally as the instructor makes note of the mistakes made. If the student reads the paragraph without any mistakes, then the material is "too easy." In this case the learner would attempt to read a paragraph written on a more advanced reading level. If the student has extreme difficulty in reading the material as evidenced by a great number of mistakes, the material is above his or her reading level. The process will determine the learner's appropriate reading level. Graded paragraphs can be used with readability indices such as the Fry (1968) and Gunning (1952) formulas.

Reading comprehension can be assessed through sentence completion and this may be appended to the "graded paragraph" technique. The teacher can develop sentences from the reading material to be completed by the student. The ABE staff should make every attempt to insure that reading selections are of interest to the student. If, for example, the passage is drawn from an elementary text and states, "Little Mary drank two glasses of chocolate milk," it may be adapted to an ABE setting as, "Mary drank two six-packs of beer." The corresponding sentence to be completed could be "Mary drank _____".

Acceptable answers would include "two six-packs of beer" or "twelve beers."

Any teacher can develop a quick assessment technique for determining math level. This is accomplished by constructing a progressive work sheet to include problems representing operations at various levels. For example, the operation of addition can be sampled by asking such problems as:

2	18	237
+3	+ 9	+924

etc. Subtraction would also be stated using similar, progressive problems. Multiplication, long division, fractions, decimal operations, algebraic operations, etc., could be sampled. As the teacher reviews the student's response sheet, an appropriate level can be ascertained.

The teacher may also develop practical problem-solving techniques for math placement. Such behaviors as balancing check-books, computing interests, and comaprative shopping can be assessed. Various formal instruments are available for this purpose but teacher-made surveys are convenient, inexpensive, and generally very practical.

Sentence completion can also be used in the field of math. For example, if a statement reads, "Big State Savings and Loan offers a 6% annual interest rate," a sentence may be constructed as, "If Henry invests $800 in Big State Savings and Loan and does not withdraw money for two years, he will have __?

Another practical approach to assessment involves the use of mastery and unit tests that are included in many worktexts. Some include diagnostic procedures that are quite good. The ABE teacher should be aware that equivalency levels and technical data for mastery tests are generally not nearly as precise as are statistical measures for standardized tests. On the other hand, they are usually more precise than are "teacher made" instruments. As a rule, unit tests can be used to supplement existing assessment techniques. Mastery tests are "custom made" for their instructional materials.

A final informal procedure consists of making decisions based on personnel data sheets completed during the course of the program. The University of Texas Information Sheet (University of Texas, 1973) was developed to be used both as an information gathering device and as a diagnostic tool. By reviewing student responses to the entries, the ABE teacher can learn something about the student from the factual information contained in the questionnaire. In addition, an interpretation guide can assist the teacher in analyzing responses so that placement levels are assigned. This form has been used extensively in Texas ABE programs.

Discussion

Several informal assessment techniques have been presented as practical tools for the ABE teacher. As a supplement, these approaches can strengthen the assessment process. They are especially useful to teachers who cannot devote full time to teaching ABE or those who do not have access to qualified counseling staffs. Informal techniques are not meant to replace the more systematic formal measuring devices, but serve as a field expedient when other approaches are impractical.

The most important advantage of informal measures is that they can be adapted for use in an ABE setting. Teachers are not required to have special technical training to administer, score, and interpret results and students can realistically complete informal instruments in a reasonable time

Continued from page 15

without the test anxiety usually associated with standardized tests. Most ABE teachers would be well advised to consider informal assessment techniques as an additional tool in working with adult students.

References

Bormuth, J.R. Factor Validity of Cloze tests as measures of reading. *Reading Research Quarterly*, Spring, 1969, 4, 361.

Fry, E. A readibility formula that saves time. *Journal of Reading*, April 1968, 5, 3-16.

Gunning, R. Technique of Clear Writing. New York: McGraw Hill, 1952.

Holder, L. Adult education bilingual handbook. Corpus Christi, TX: Vol. 1, *Education Service Center*, Region II, 1976.

James, W. B.; Peters, J. M.; Roberts, L.; and French, R. Using the cloze procedure. Knoxville, TN: Department of Continuing and Higher Education, University of Tennessee, 1974.

Kennedy, E. C. Classroom approaches to remedial reading. Itasca, IL: Peacock, 1971.

Rakes, T. A. Where to begin. *Adult Leadership*, February, 1971, 255.

Smith, E. H. Literacy education for adolescents and adults. San Francisco: Boyd and Fraser, 1970.

Stanley, J. Graded paragraphs. in Assessing Needs and Interests: Informal Techniques, Learning Modules for Adult Educators, College Station, TX: Adult and Extension Education, Texas A&M University, 1978, p. 82.

Stufflebeam, D. T., (Chairman), Phi Delta Kappa National Study, Educational evaluation and decision making. Itasca, IL: Peacock, 1971.

University of Texas. "Information Sheet," Austin, TX: Bureau of Estension Printed in *Establishing Adult Learning Centers in Community Libraries*, 1973.

Vonderhaar, K. L.; Mocker, D. W.; Leibert, R. E.; and Maass, U. Tests for adult basic education teachers. Kansas City: University of Missouri, Center for Resource Development in Adult Education, 1975.

Note: The techniques discussed in this article are part of the material included in the module *Assisting Needs and Interests: Informal Techniques*. For further information or detail on these techniques, contact the authors.

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ASSESSMENT INSTRUMENTS

WHAT INSTRUMENTS ARE AVAILABLE?

Commercial producers and practitioners have developed surveys, inventories, tests, and other instruments by the thousands. Generally, they fall into these broad categories:

- *Intelligence tests.* These attempt to measure a person's overall ability to learn. Individual intelligence tests are usually more valid but they are time consuming and expensive. Administrators need special training to give them. I would caution you about giving I.Q. (intelligence) tests. People can really get "turned off" by them. *Before you give an I.Q. test, check with your counselor or psychologist.*
- *Aptitude tests.* This type measures a person's ability in a specific area such as mechanical abilities, finger flexibility, occupational skills, etc. An aptitude is an *ability to perform* rather than actual performance.
- *Achievement tests.* Achievement instruments measure what the person has learned regardless of his or her ability to learn. As an adult educator, you may have occasion to use achievement tests. Some are diagnostic while some should only be used for placement. They come in a wide variety of forms, price ranges,and required times for administration.
- *Interest inventories.* This group of instruments tells you what interests a student has. They may be especially useful if the student needs help with deciding on a course of study, leisure, activities, or career aspiration.
- *Vocational surveys.* A number of instruments have been developed to help people make career decisions. They can be used in conjunction with other counseling techniques. Make sure you use the "adult" form with your students.
- *Personality inventories.* These tests will give an expert some indication of a person's emotional stability. Do not attempt to use personality inventories unless you are fully qualified. I suggest that you consult with your counselor or psychologist before using these.
- *Special tests.* A number of test, such as the General Educational Development (GED) Test, have been developed for specific purposes. Entrance examinations and qualifying tests are examples.
- *Criterion-referenced tests.* So far, the tests that we have discussed have been "norm referenced." This means that your subject's response is compared to the responses of others in the norm group. Some tests seek to determine if a person can perform a given task without regard to comparison. An example would be an assessment of welding skills. If the student can weld a pipe that doesn't leak, he passes; regardless of whether or not others of his sex and age can do the same.

- *Informal instruments.* Many tests can give you valuable information. They are usually quick and easy to score but are not what we usually consider "standardized tests." An example would be the diagnostic section of many programed texts. Use these whenever possible.
- *Teacher-made surveys.* For many adult educators a teacher-made test serves a very important function. If you or a colleague construct an instrument, you can make it relate specifically to your needs. Teacher-made instruments afford you great flexibility.
- *Data - collection sheets.* Although data sheets are not tests, they can provide you with important information about the student. These are discussed in the next learning activity.
- *Anecdotal records.* Each time you observe a student you get some sort of mental picture of that person. If you can commit these impressions to writing, you have an anecdotal record. It needs to be as objective as possible--stating only facts, not opinions. For example, "She is a happy student" is an opinion whereas "She worked independently for 46 minutes" is a fact. If you have opinions, clearly identify the statements as such.

WHERE DO I GET INFORMATION ABOUT INSTRUMENTS?

This information can come from a number of sources:

- Fellow colleagues - Talk to your co-workers and find out which instruments have been successful.
- Local counselors - Many programs have fulltime counselors who can advise you in this matter.
- University faculty - Many colleges and universities have experts who will gladly share information with you.
- *Buros Mental Measurement Yearbooks* - This book is probably the best source for finding out about a test. Note, however, that it is expensive, highly technical, and indexed with a complex system.
- Professional journals - Some educational journals review and critique instruments regularly. They are written in scholarly style and require some technical knowledge on the reader's part.
- Learning Resource Centers and Regional Service Centers - These sources are manned with professionals and materials. They are good sources for finding information.
- Test publishers - Major publishers produce brochures that explain their product. Remember that these firms are trying to sell a product.

SETTING UP THE SYSTEM

You must develop a system that you can use in your program. I keep reiterating this point because I believe it is the key to good assessment. This article will review some of the steps that others have found helpful in setting up a system.

Assessment records are confidential. Arrange your forms so that each student has access to his own record but does not violate the rights of others. Do not discuss any student's assessment data with others except in a professional context. If you have aides or clerks, instruct them in this regard.

WHAT FORMAT IS BEST?

In most cases you will want to keep the format as simple as possible. A number of folders, binders and notebooks are available from commercial sources. Your choice should be durable, convenient, and attractive. I personally prefer a binder that enables me to add and delete pages without rearranging the entire profile book.

File cabinets are ideal for assessment records. If you are lucky enough to have your own classroom or learning center, you can use a permanent furnishing to house records. If you teach nights or weekends in another facility, you will have to reduce your records to a portable form.

How often have you completed lengthy forms that are filed away in some cabinet to collect dust? Don't let this happen to your assessment records. If you collect information that isn't used, you probably shouldn't collect it. Good assessment leads to objective formation and prescription. Your preassessment records should be an integral part of the student's progress profile.

WHICH ELEMENTS SHOULD BE INCLUDED?

Since we have already discussed possible sources of assessment, I have arbitrarily chosen a few selected types of entries that you might wish to maintain. For the purpose of this narrative, let's pretend that you are an ABE teacher teaching all subjects.

- *Personal Data Sheet (completed by the student).* Include only those entries that you feel are appropriate. For example, you might design a sheet that lists name, age, address, marital status, occupation, highest grade completed, length of residence here, emergency phone number, background information, etc... Each of these entries gives you relevant information about the student. You would want to delete irrelevant or redundant information. Examples like wife's maiden name or shoe size are irrelevant. Arrange the data sheet so that it appears first when you open the folder.

Be tactful in developing a data sheet. Adults may be offended if you ask "How much money do you make?" An entry for occupation will give you a good approximation of the student's income. Don't fall into that "middle class value" trap. Questions like, "How many honors did you receive in school?", or "how many college credits do you have?" could be damaging to the student's self-concept. After developing your data sheet, have a colleague proofread it. Be sure the entries are clear, concise, and simple.

One unique approach to the data sheet is the "Texas Information Sheet" (See Sample A). This instrument will gather information about the student, and it also serves as a placement device. By following the enclosed instructions you can analyze the student's answers and get an idea of his or her reading level.

- *Interview Summary Sheet.* If you arrange an intake interview for your students, have some way of recording information. Do *not* write during the interview. Take a couple of minutes after the interview and jot down brief impressions. If you design a summary sheet before hand (See Sample B), you can easily follow that format. Possible categories would include interests, vocational aspirations, hardships, reason for enrolling in program, background information, and a miscellaneous heading. I find a miscellaneous heading useful because it gives you room for impressions not covered by other categories.

Achievement scores. You can note the individual's test scores on this sheet (See Sample C). Unfortunately, many tests give you scores in grade equivalent form. I feel that this is inappropriate for adults. In effect we are saying "John Jones functions on a fourth grade level. He is about the same as the little kid down the street." Grade equivalents are derived from raw scores so the teacher would accomplish the same result by explaining raw scores and omitting grade equivalents. Raw scores become more meaningful when they are compared to other raw scores. "John Jones scored 441 on an achievement test." After 10 months in the program John takes the test again and scores 518. Progress has been measured and level communicated without insult.

Be careful of composite or average scores. They can be misleading. Suppose Cheryl scores 87 on a composite achievement test. We cannot assume that this is her score in each category. She may have scored 53 in math, 81 in spelling, and 107 in reading. Always include the break-down scores as well as the composite score.

- *Informal Scores.* I prefer to keep the form as simple as possible so I suggest listing all scores on a single sheet by category (See Sample D). If we use percentile ranks, it is easy to compare scores for validity. If a student scores in the 30th percentile rank on one standardized test and in the 34th on a second informal survey, we have validity. Note, if extreme differences occur, it means that at least one of the measures is inaccurate.

  The completed test form may be filed at the back of the folder as a back-up document. Only the scores need to occupy "prime space."

- *Other Information.* If you choose to measure traits and attitudes in areas other than your teaching field you may wish to file them in a separate section (See Sample E). The ABE teacher might want to include the results of vocational interest surveys, self-concept measures, or similar areas in this section.

- *Agency Referral Sheet.* Since students might be eligible for a variety of services from other agencies a referral sheet may be in order. I would suggest noting this type of information in each student's profile (See Sample F).

THE INFORMATION SHEET IS A PLACEMENT INSTRUMENT

A considerable amount of information is necessary in order to complete each student's file-folder and it is felt that several things might as well be accomplished at once, so questions relating to the file-folder information are used as the basis for a placement instrument. This test is devised in such a manner that the student feels that he is filling out an application questionnaire, rather than taking an examination.

Later, the student's instructor or the teacher-aide can transfer the information from the placement instrument to the file. The placement instrument accomplishes at least three purposes simultaneously. One, it offers a gross placement for the incoming student. Two, it accumulates necessary information for the student's information file. Three, it puts the student "at ease" to the sense that the student feels that he is still in the preliminary stages of his enrollment and is not yet under stress. Also, the instrument gives the instructor a good beginning for judging the student's usable vocabulary, grammar, punctuation, spelling and reading ability, all of which is invaluable information in setting up a program of individualized instruction for the student.

Briefly, the rationale for the placement instrument is as follows: if the student can read at all, and can write at all, then the questions coming under the "A" section can most likely be answered. If the student goes no further than the "A" section then he is a Level I student and should be placed in the appropriate worktexts. If a student forges ahead into the "B" section, but fades before he finishes, he should be placed in the terminal Level I group or into the low Level II group. If the student goes straight through the "B" section answering the questions as they stand, with accurate and clear answers, then clearly he should be placed into the top end of Level II group with Level III material ready for him. If the student sweeps right on into the "C" level questions and answers them correctly, which means <u>without</u> misspelling or bad punctuation or grammar and <u>with</u> understandable responses which are pertinent to the questions, then the student should be placed in G.E.D. preparatory material and readied for the G.E.D. tests. Of course, if he has some degree of capability in understanding the wording of the questions in section "C", but falters in answering, the student should be placed in Level III, and psychologically, as well as academically, readied for entry into the G.E.D. preparatory level.

SAMPLE A

Developed by

Extension Teaching and Field Service Bureau
Division of Extension
For University of Texas at Austin
Permission to reproduce granted
in Adult Education Program

Information Sheet

A. 1. Write or print your name: JAMES Young

2. What is your address? 118 SMITH St BRYAN, TEXAS

3. What is the date today? JAN 17

4. Do you have a telephone? no What is the number?

5. Are you married? YES What is your husband's name (or wife's name)? ANN

6. When is your birthday? FEB 2

7. When were you born? FEB 2

B. 1. Are you a citizen of the United States? YES

2. Are you a citizen by birth or by naturalization?

3. Do you maintain private transportation?

4. If so, what type?

5. Do you possess a valid driver's license?

6. What is your ethnic origin?

7. Are you a registered voter in the State of Texas?

8. If you are presently employed, please indicate whether you are employed on a full-time or a part-time basis

9. How long have you worked for your present employer on the job which you now hold? 8 YEARS

10. Do you subscribe to an Austin newspaper?

11. Do you subscribe to other newspapers or magazines?

12. If so, please list them

13. Do you own (or have ready access to) a T.V. set? YES

14. Do you own a radio or is one available to you? NO

Information Sheet, continued

15. Please answer with either **fine, good, fair, poor** or **bad** the following questions:
    a. How is your vision? OK
    b. How is your hearing? OK
    c. How is your general health? OK
16. Please write in words the number of times you estimate that you visit the doctor each year. 1
17. How did you learn about this program? A FREnd toLE ME

C. 1. Please write a brief and pertinent paragraph explaining how you were made aware of this program.

2. Please write a paragraph telling the aspirations which you have that you feel can be enhanced or furthered by the program which you are now beginning.

3. Please write a paragraph about yourself, as **you** see yourself. You may reiterate the information which you have already given in the above paragraph.

4. Give me that information which you feel will be most helpful in aiding an instructor who is trying to prepare a program of instruction suited to your particular needs.

INTERVIEW SUMMARY SHEET

Date: From Nov. 2, 1977 To Jan. 3, 1978 Name: James Young

Nature of Program	Name of Program	Goals	Objectives	Achievements
Academic	ABE / LC	(1) RAISE READING LEVEL 1 G.L. IN NEXT 10 MONTHS (2) RAISE MATH LEVEL 1 G.L. IN NEXT 10 MONTHS	1. COMPLETE H&R READING SERIES IN CALENDAR YEAR 2. COMPLETE PHASE I & II OF BLATZ MATH TEXT 3. RAISE APL SCORE TO LEVEL II IN 10 MONTHS	1. P.5 H&R Nov. 9 P.36 " " Nov. 22 2. PHASE I ✓ DEC. 16
Vocational	BLGI TR	COMPLETE COURSE IN MARCH '78 SECURE FULL TIME EMPLOYMENT	AS STATED IN VO/TECH CURRICULUM	ENROLLED Nov. 16 '77
Counseling	ABE	INCLUDED ABOVE	(1) CONTROL DRINKING BETTER (2) MANAGE MONEY BETTER	

Additional Goals or Recommendations:
James is eligible for TRC compensation
REFERRED TO

SAMPLE B

SAMPLE C

ACHIEVEMENT SCORE RECORD SHEET

Name of Student J. D. Young

Class 2-1

	Name of Test	Date of Test	Subsection	Raw Score	Percentile Rank
1.	Pickel	10-30-77	a Math Gen.	217	22
			b Comp.	291	28
			c Mult.	83	16
			d Div.	56	32
			e Fract.	28	11
2.	CMI	12/8/77	a Read	46	23
			b Spell	25	16
			c Comp.	71	8
			d Math	41	42
			e		
3.	A & M	12/10/77	a Count	97	N/A
			b FGR	87	"
			c BLT	81	"
			d		
			e		
4.			a		
			b		
			c		
			d		
			e		

SAMPLE D

INFORMAL RECORD SHEET

Name of Student: J. D. Young

Class: 2-1

Name of Test	Date	Subject	Score	Comments
1. Bolo INTEREST	12/77	Pastimes Hobbies Interests	N/A	Likes (1) Outdoor (2) Mechanical Social
2.				
3.				
4.				

SAMPLE E

SUPPLEMENTARY RECORD SHEET

Name of Student J. D. Young

Class 2-1

Name of Instrument	Date	Subject	Score	Comments
1. INTRO READ	11/77	Rd.	67	TROUBLE WITH WORD ATTACK
2. GRADED PARAGRAPH	11/77	"	N/A	4.3 USING SPILLAR FORMULA
3.				
4.				
5.				
6.				
7.				
8.				
9.				

B. WHERE AM I GOING?

OBJECTIVES

This section presents information concerning the development of objectives in the cognitive, affective, and psychomotor domains. Behavioral objectives state the goals of learning in terms of observable student behavior. Because they clearly communicate the educational intent of the instructor, behavioral objectives serve as guideposts for planning the total learning experience. Objectives, stated in terms of performance, provide criteria for measuring present levels of knowledge. They indicate appropriate methods and techniques to use in teaching and planning student learning experiences. Behavioral objectives also provide a basis for planning the evaluation of those experiences. In adult education, clearly stated objectives can have the added benefits of providing teachers and students with a concrete relationship between classroom activities and previously assessed needs and goals and defining the learning process into small, easy to attain steps.

Sample objectives and brief explanations of each domain are presented on page 67. Also, the six levels of higher thought processes in the cognitive domain are mentioned.

Often, it is hard to think of a variety of different words to express the intended objective. Pages 68 and 69, Quality of Behavioral Objectives, provides action words that can be used to write objectives.

Additional information on the Cognitive Domain is presented in the chart on page 70. Explanations by level, illustrations and sample terms for outcomes are given. Similar information on the Affective Domain is presented on page 71.

Pages 72-74 picture diagrams of the three domains---Cognitive, Affective and Psychomotor---in hierarchical structures from simple to complex levels.

WRITING INSTRUCTIONAL OBJECTIVES

SAMPLE OBJECTIVES IN EACH DOMAIN

COGNITIVE DOMAIN - mental processes
Example: Given a newspaper article, the student will identify the prefixes and suffixes it contains.

AFFECTIVE DOMAIN - attitudes, emotions, values and interests
Example: In a discussion of local political issues, the student will show an increased sense of responsibility as a citizen by discussing possible ways citizens can influence local decisions.

PSYCHOMOTOR DOMAIN - neuromuscular coordination
Example: Given lined paper and pencil, the student will print the alphabet both in capital and lower case letters.

Note: Objectives do not always fall exclusively in one domain or another. Both the examples in the affective and psychomotor domains require cognitive processes, recall of certain facts. However, the objectives are concerned with affective and psychomotor outcomes.

COGNITIVE LEVELS

1. KNOWLEDGE - recall of facts
2. COMPREHENSION - restating knowledge
3. APPLICATION - applying or using information in a new situation
4. ANALYSIS - examining parts of a communication and the relationship between parts
5. SYNTHESIS - putting together information in a unique or novel way to solve a problem
6. EVALUATION - making judgment based on given criteria

Quality of Behavioral Objective

Unfortunately, there are many words open to misinterpretation. These are words that should be avoided if the behavioral objective is to possess quality.

Consider the following examples of words in this light:

to know	to grasp the significance of
to understand	to enjoy
to really understand	to believe
to appreciate	to have faith in
to fully appreciate	to realize

Thus, the behavioral objective that communicates best will be one that describes the behavior of the learner well enough to preclude misinterpretation.

The following examples of action words can be used in writing behavioral objectives. These words will describe the desired behavior of the learner at the proposed level of learning.

1. KNOWLEDGE LEVEL

count	list	recall
define	name	recognize
draw	point	record
identify	quote	repeat
indicate	read	state
tabulate	trace	write

2. COMPREHENSION

associate	compare	compute
contrast	describe	differentiate
distinguish	estimate	extrapolate
interpret	classify	compare

3. APPLICATION LEVEL

apply	calculate	solve
illustrate	practice	use
utilize	complete	demonstrate
employ	examine	order

4. ANALYSIS LEVEL

group	relate	transform
summarize	construct	detect
analyze	infer	separate
explain	investigate	divide

5. SYNTHESIS LEVEL

arrange	combine	create
design	develop	formulate
generalize	construct	integrate
organize	plan	prepare
prescribe	produce	propose

6. EVALUATION LEVEL

appraise	assess	critique
determine	evaluate	grade
judge	measure	rank
recommend	specify	estimate
rate	select	test

COGNITIVE DOMAIN (BLOOM)*

MAJOR CATEGORIES	ILLUSTRATIONS	TERMS FOR OUTCOMES
1. KNOWLEDGE -Remembering of previously learned material -Specific facts	-Knows common terms -Knows specific facts -Knows basic concepts -Knows principles	Defines, describes, Identifies, labels, lists, outlines, states, etc.
2. COMPREHENSION -Ability to grasp the meaning of material	-Understands facts -Interprets charts and graphs -Justifies methods and procedures -Estimates future consequences	Converse, defends, distinguishes, estimates, explains, extends, gives examples, infers, predicts, rewrites, summarizes
3. APPLICATION -Ability to use learned material in new and concrete situations	-Applies concepts and principles to new situations -Solves mathematical prob. -Constructs charts and graphs -Demonstrates correct usage of a method or procedure	Changes, computes demonstrates, discover, modify, predict, relates, prepares, produces, shows, solves, uses
4. ANALYSIS -Ability to break down material into its component parts so that its structure may be understood	-Recognizes the logical fallacies in reasoning -Evaluate the relevancy of data	Diagrams, differentiates, distinguishes, identifies, illustrates, infers, outlines, points out, relates, separates
5. SYNTHESIS -The ability to put parts together to form a new whole	-Writes a well organized theme -Proposes a plan for an experiment -Formulates a new scheme for classifying objects	Categorizes, combines, composes, creates, designs, explains, modifies, organizes, rearranges, rewrites, tells, writes
6. EVALUATION -Ability to judge the value	-Judge the value of work	Concludes, contrasts, criticizes, describes, explains, justifies, relates, summarizes, supports

*Adopted from Gronlund

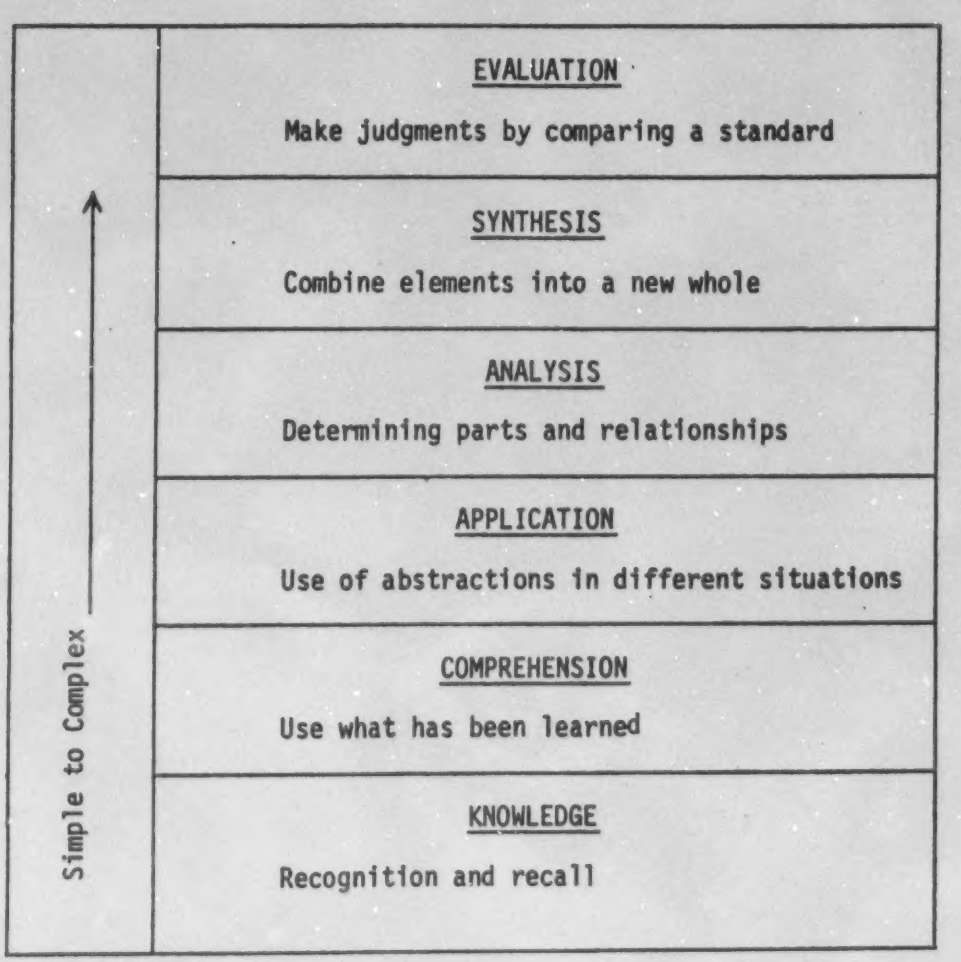
AFFECTIVE DOMAIN (KRATHWORL)*

*Adapted from Gronlund

MAJOR CATEGORIES	ILLUSTRATIONS	TERMS FOR OUTCOME
1. RECEIVING -Student's willingness to attend to classroom activity -Getting, holding, and directing students attention	-Listens attentively -Shows awareness of the importance of learning -Attends closely to the classroom activities	Asks, chooses, describes, follows, holds, locates, selects, replies, uses
2. RESPONDING -Active participation on the part of the student	-Completes assigned homework -Participates in class discussion -Volunteers for tasks -Shows interest in subject -Enjoys helping others	Answers, assists, conforms, greets, discusses, helps, performs, presents, reads, recites, tells, writes
3. VALUING -The work or value a student attaches to a particular object, or behavior	-Demonstrates beliefs in the democratic process -Shows concern for the welfare for others -Demonstrates problem-solving attitude -Demonstrates commitment to social improvement	Completes, describes, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, shares, studies, works
4. ORGANIZATION -Bringing together different values, resolving conflict between them, and beginning the building of a consistent value system	-Recognizes the need for balance between freedom and responsibility in a democracy -Accepts responsibility for his own behavior -Understands and accepts own strengths and limitations -Formulates a life plan in harmony with his abilities, interests, beliefs	Adheres, alters, arranges, combines, compares, defines, explains, identifies, modifies, orders, prepares, relates, synthesizes
5. VALUE OR VALUE COMPLEX -The individual has a value system that has controlled his behavior for a sufficiently long time for him to have developed a "life style"	-Demonstrates self-reliance in working independently -Cooperation in group activities -Punctuality and self discipline	Acts, discriminates, displays, influences, listens, modifies, performs, practices, qualifies, questions, solves, uses, verifie

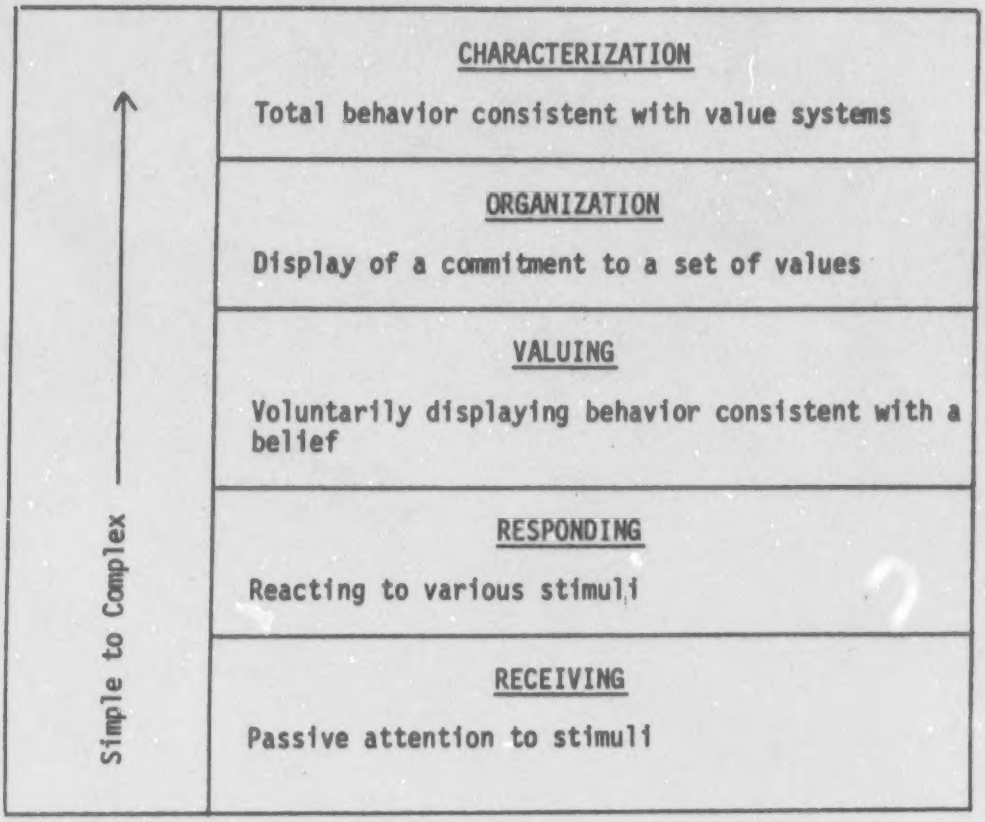
HIERARCHICAL STRUCTURE OF THE

LEVELS OF THE COGNITIVE DOMAIN



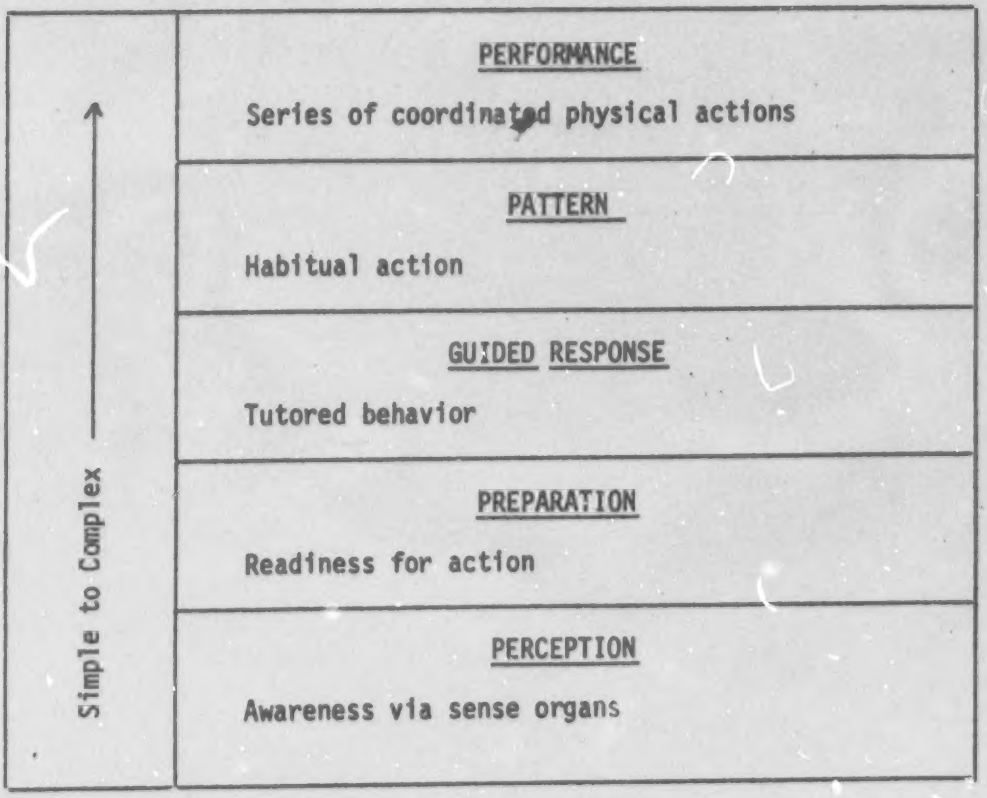
HIERARCHICAL STRUCTURE OF THE

LEVELS OF THE AFFECTIVE DOMAIN



HIERARCHICAL STRUCTURE OF THE

LEVELS OF THE PSYCHOMOTOR DOMAIN



C. HOW WILL I GET THERE?

STRATEGIES

All teachers have a 'bag of tricks' to enable them to help their students achieve their goals. The selection and implementation of strategies represent the act of teaching itself. The key to good teaching is flexibility. The section presents ideas for utilizing some of the tricks of the trade and allowing teachers more flexibility.

The first article explores "Teaching Styles and Instructional Strategies". It deals with the notion of relating teaching style to learning style and the selection of strategies based on preferences and variety. The Instructional Strategy Inventory presented on page 80 provides one way to diagnosis your own teaching style.

Pages 82 to 91 involve a variety of selected methods for teaching. Each sheet explains the methods, states how it can be used, identifies physical requirements and presents some advantages and disadvantages.

Dale's Cone of Experience on page 92 illustrates the progression of activities from the concrete to the abstract. Generally activities at the bottom of the pyramid represent activities of action which increases the involvement of the learner and increase the amount of learning.

Dale's Cone is again utilized in Appendix C which is a learning activity entitled "Hollywood Squares". This activity asks an individual to match teaching methods with descriptor statements in a fun way. Follow the directions provided on page 118 to assemble the activity.

TEACHING STYLE AND INSTRUCTIONAL STRATEGIES

by Russell L. French*

The old, cliched argument about teaching as art or science lacks meaning for the modern educator. We now know that it is more appropriate to talk about instruction as a process in which the various phases and variables can be consciously, purposefully manipulated.

What aspects of the process are manipulated, why they are manipulated, how the manipulation is accomplished and what effect the old or new processes have can be pre-determined and post-evaluated. Scientific decision-making is required.

But the process of instruction does not constitute the whole of teaching. Teaching is instruction plus the resolution of several personal, human factors in the teacher and the individual being taught. Human factors are not so easy to identify, describe, change, correlate or control. The all-important meshing of human variables with instructional process dimensions is probably more art than science.

Among the human variables which must be considered in the teaching-learning process is the variable of "personal style." If we are talking about learners, then discussion of style must focus on learning style. If we are discussing or evaluating teachers (or their efforts in developing and implementing instruction), teaching style becomes a matter of importance.

So little is presently known about either teaching styles or learning

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styles, that we are essentially theorizing or conjecturing when we invite the discussion. Yet, we may add a new dimension to the teaching-learning process in our schools, if we dare to tread somewhat lightly on this untested ground.

If we assume that every human being has his own personal learning style and that these styles are somehow related to our dependence upon one or another sensory-input process, the resultant, theoretical list of styles available might look like this:

STYLE	CHARACTERISTIC
PRINT-ORIENTED	Dependence on reading and writing
AURAL	A listener; doesn't say much
ORAL (INTERACTIVE)	A talker; learns through discussion
VISUAL	Must have many visual stimuli and visual representations
TACTILE	Has to touch everything and everyone
MOTOR	Has to move about while learning
OLFACTORY	Learns through smell and taste.

We do not know that these orientations to learning are mutually exclusive. There may be persons who incorporate two or more of the above into yet another style, undefined here. For others, style may change with variations in learning situations.

The notion of learning styles certainly says something to us about organizing and developing instruction for the benefit of learners, but should it also say something to us about teachers?

Since teachers are usually human beings, it is reasonably safe to assume that each has his or her own learning style. What then is the relationship of learning style to teaching style?

Suppose we assume (for lack of better or more logical data) that one's teaching style is directly correlated (perhaps a mirror image of) his learning style. This means that a teacher engaged in development and inplementation of instruction will be likely to select for use teaching strategies, measurement approaches, and perhaps even objectives with which he is comfortable as a learner.

At first glance, this might seem to be a horrifying thought. But closer inspection of the idea offers several positive suggestions for the improvement of instruction and teaching-learning relationships:

1) Teachers, like others, need to feel positively about themselves. Instead of making teachers feel that they should be carbon copies of each other, we need to help them recognize, understand, accept and use their unique styles and strengths to the advantage of learners.

2) Matching of teachers and learners on the basis of style (learning style with teaching style) offers potential for reaching students who have been "problems" for us in the past.

3) Teachers who recognize their own learning and teaching styles can consciously select and employ instructional strategies beyond their usual range of choices to increase student options for learning. Without recognition of their own personal styles, teachers do not have a basis for choice.

Given a particular learning style, what is my teaching style likely to embody, and which instructional strategies am I most likely to select (unless I work at broadening the selections)? The correlations might resemble the following:

Learning Style	Teaching Style	Instructional Strategies
PRINT-ORIENTED	PRINT-ORIENTED	Reading assignments, book-oriented discussions, production of written materials
AURAL	AURAL	Panel discussion, audiotapes, asks questions (a few key ones), other listening experiences

ORAL (INTERACTIVE)	ORAL	Lecture, T-Groups, role play, students-student interaction, Socratic discussions, question-answer, interviews, debates.
VISUAL	VISUAL	Motion pictures, slides, filmstrips, television, magazines (illustrated), demonstration, field trips, exhibits.
TACTILE	TACTILE	Construction and "making" activities. Nonverbal exercises.
MOTOR	MOTOR	Role play, games, action mazes, nonverbal exercises, student demonstrations, learning centers.
OLFACTORY	OLFACTORY	Trips, exhibits, addition of taste and smell experiences to daily activity.

If the assumptions inherent in this paper are true, it is obvious that a teacher's learning style and teaching style will influence his selection of instructional strategies. Instructional improvement may depend upon the teacher's recognition of these relationships and his/effort to use himself to the advantage of students.

INSTRUCTIONAL STRATEGY INVENTORY

(Check below the materials/approaches you use frequently in the classroom)

1. _____ motion pictures
2. _____ lecture, information-giving
3. _____ oral book reports
4. _____ assignments to be read
5. _____ role play
6. _____ use of modeling clay, plaster of paris, papier-mache
7. _____ odor discrimination activities
8. _____ television programs
9. _____ audiotapes
10. _____ panel discussions
11. _____ written reports
12. _____ nonverbal exercises
13. _____ drawing or painting
14. _____ tasting
15. _____ filmstrips
16. _____ records
17. _____ debate
18. _____ free reading
19. _____ action mazes
20. _____ creative writing
21. _____ scented materials (such as scratch and sniff)
22. _____ slides
23. _____ reading or reciting to learners
24. _____ group discussion
25. _____ creative writing
26. _____ dramatizations
27. _____ model building
28. _____ still pictures
29. _____ games
30. _____ project construction
31. _____ T-groups

PLEASE GO TO SECOND SHEET WHEN YOU HAVE COMPLETED YOUR CHECKS.

If your check-marks fall into one of the patterns indicated below, consider the possibility that you may have a teaching style such as the one indicated for that pattern of check marks. Identification of your style orientation may help you identify ways in which to expand your instruction and reach a greater number of learners.

PATTERN	STYLE
1, 8, 15, 22, 28	VISUAL
2, 9, 16, 23	AURAL
3, 10, 17, 24, 31	INTERACTIVE
4, 11, 18, 25	PRINT-ORIENTED
5, 12, 19, 20, 26, 29	KINESTHETIC (MOTOR)
6, 13, 20, 27, 30	HAPTIC
7, 14, 21	OLFACTORY

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BRAINSTORMING

Brainstorming is a technique where creative thinking takes precedence over the practical. The idea is to get out before the group all ideas possible, with no thought to how practical the ideas might be. The participants are urged to be as "free wheeling" and uninhibited as possible.

Brainstorming May Be Used:

1. To get as many new and novel ideas as possible before the group for evaluative discussion.
2. To encourage practical-minded individuals to think beyond their day-to-day problems and to think quantitatively instead of qualitatively.
3. To move out on a problem when the more conventional techniques have failed to come up with a solution.
4. To develop creative thinking.

Some Advantages:

1. Many people are thrilled at the freedom of expression inherent in brainstorming.
2. Solutions to previously insoluable problems can be discovered.
3. All members of the group can be encouraged to participate.

Some Limitations:

1. Many individuals have difficulty getting away from the known practical.
2. Many of the suggestions made may not be worth anything.

Physical Requirements:

1. A meeting room with a chalkboard or other surface on which the ideas produced can be written hurriedly and preserved for the followup discussion period.

Procedure:

1. The chairman explains the procedure to be used, and a recorder is selected to list the suggestions.
2. As ideas are thrown out they are recorded in public view.
3. All ideas are recorded whether repetitious or not.
4. No discussion is allowed at this time.
5. A follow-up activity utilizing the ideas generated is essential.

GROUP DISCUSSION

A group of persons meeting together over a prolonged period of time to verbally interact on a given topic in order to reach decisions, to make recommendations or to clearly recognize disagreement.

The Discussion Group May Be Used:

1. To share the knowledge of individuals with others in the group.
2. To develop understanding of and seek solutions for problems and to plan for action.
3. To develop new attitudes and opinions through discussion and the examination of information.
4. To arrive at carefully considered decisions.

Some Advantages:

1. Group discussion permits full participation.
2. It can establish consensus democratically.
3. It pools the abilities, knowledge, and experience of all to reach a common goal.

Some Limitations:

1. Group discussion is time consuming, particularly if the group includes persons of widely different backgrounds.
2. A bossy leader or a few members may dominate the discussion.

Physical Requirements:

1. The group is ideally seated around a large table (or tables arranged in a rectangle) or chairs are arranged in a circle. Face-to-face discussion is essential. An informal and relaxed atmosphere will permit free discussion.
2. The group should be no smaller than seven or eight and no larger than 15 members.

Procedure:

1. Generally, the leader will preside and moderate the discussion.
2. The group should appoint a recorder to keep track of its deliberations and to report on its progress from time to time.
3. A group may meet as long and as often as is necessary and convenient.
4. A change of leaders may be made to utilize special individual abilities.

INTERVIEW

The interview is a presentation in which one or more resource persons respond to questioning by one or more interviewers.

The Interview May Be Used:

To explore a topic in depth where a more formal presentation is not desired by either resource expert or audience.

Some Advantages:

1. The presentation is less formal than a speech or lecture.
2. The audience is represented by the interviewer.
3. There is some insurance that the discussion will follow the interests of the members of the audience.
4. Many resource persons shy away from formal presentations.

Some Limitations:

1. The role of the audience is basically passive.
2. Interviewer must know the subject, audience desires, and the technique of interviewing.
3. Talking to both audience and the other person or persons making the presentation is sometimes an awkward arrangement.

Physical Requirements:

1. Adequate seating so that every member of the audience may see and hear the speakers in comfort.
2. A platform or stage large enough to hold all participants.
3. Microphones located so all speakers may be heard from where they are sitting.

Procedure:

1. The interviewer and resource person discusses the overall topic to be discussed, and agree on the general line of questioning.
2. The interviewer asks the resource person questions designed to explore various aspects of the topic, and improvises questions as the interview progresses.
3. Questions from the audience may be used at the end of the interview.

PANEL

The panel is a group of four to eight persons with a special knowledge of the subject holding an orderly conversation on an assigned topic in full view of the audience.

The Panel May Be Used:

1. To identify and explore a problem or issue.
2. To give the audience an understanding of the various parts of a problem.
3. To weigh the advantages and disadvantages of a course of action.

Some Advantages:

1. The panel establishes informal contact with the audience.
2. Frequent changes of speaker and viewpoint which interest audience and stimulate discussion.

Some Limitations:

1. The panel may not cover all aspects of the problem or may over-emphasize one aspect.
2. The subject may not be considered in logical order.
3. Extreme difference of opinion among the panel may block progress toward a solution.
4. To keep the discussion moving may require a skilled moderator.

Physical Requirements:

1. Adequate seating so that every member of the audience may see and hear the speakers in comfort.
2. A stage or platform large enough to seat the panel in comfort along a table facing the audience.
3. Microphones located so all speakers may be heard from where they are sitting.

Procedure:

1. The panel members are introduced by the moderator. Each may make a short statement (not more than five minutes) before the exchange of ideas and comment begins.
2. The panel may be used to develop a subject introduced by a film or short lecture. It may be followed by a forum in order to broaden discussion and involve the audience.

DEMONSTRATION

The demonstration is a presentation that shows how to perform an act or to use a procedure. It is often followed by the learner carrying out the activity, under the guidance of the instructor. It is basically a visual presentation, accompanied by oral discussion.

The Demonstration May Be Used:

1. To teach people to carry out a particular task.
2. To show a new technique or procedure.
3. To convince that a new product or procedure has merit.

Some Advantages:

1. Individuals are more likely to believe what they see than what they hear or read.
2. Actual materials or models are used.
3. The pace is flexible and the demonstrator can move at the pace desired by the students, and repeat as necessary.

Some Limitations:

1. Considerable time and often expense can be involved in obtaining necessary materials, and heavy objects are difficult to transport.
2. If small objects are used, there is a strict limitation on the number of people who can adequately observe.
3. If a limited number of materials are available, some members of the group may not be occupied while one individual is going through the process of imitating what they have seen demonstrated.

Physical Requirements:

1. A raised platform or area from which to work with proper lighting that will permit all members of the audience to observe.
2. Necessary demonstration materials.

Procedure:

1. Demonstrator lines up all necessary materials, and selects suitable location.
2. Demonstrator presents demonstration. (A commentator may be used to describe the demonstration, or the demonstrator may give the oral portion of the demonstration.)
3. Members of the audience (all or selected members) imitates what has been shown, with help and/or criticism by instructor and fellow students.

ROLE PLAYING

In role playing some members act out a real-life situation in front of the group. There is no script, no set dialogue, and they make up their parts as they go along. The group then discusses the implications of the performance to the situation or problem under consideration.

Role Playing May Be Used:

1. To examine a delicate problem in human relations.
2. To explore possible solutions to an emotion-laden problem.
3. To provide insight into attitudes differing sharply from those of the participants.

Some Advantages:

1. A dramatic way of presenting a problem and stimulating discussion.
2. It can provide clues to possible solutions and explore them without the dangers inherent in a real-life trial and error approach.
3. It gives the players a chance to assume the personality of another human being--to think and act like him.
4. It gives members a chance to "walk in another's shoes."

Some Limitations:

1. Some people may be too self-conscious or too self-centered to act successfully in role playing. Others may be shy and fear being made "ridiculous" before the group.
2. Role playing before large audiences is less effective because of the psychological effect of the large group upon the players.

Physical Requirements:

A room large enough to provide seating so that all members of the group may see the action. No stage or platform is necessary with groups of 30 or less. Costumes or elaborate props are not necessary.

Procedures:

1. The problem or situation is clearly defined by the group before role playing begins, and the scene is set by the group leader with the assistance of the group.
2. Players should be selected just before role playing begins and not warned in advance, although a brief warm-up period may be necessary to throw off self-consciousness and get in the spirit.
3. The leader should allow the action to proceed only so long as it is contributing to understanding (usually five to ten minutes) and should protect from hurt as necessary.
4. After discussion, a second set of actors may be chosen and the scene replayed.

CASE STUDY

The case study is a detailed account of an event or a series of related events that may be presented to an audience orally, in written form, on film, or in a combination of these forms.

The Case Study May Be Used:

1. To present in detail to a group a problem with which the group is concerned.
2. To present and study the solution of a problem similar to one confronting the group.
3. To teach the problem-solving process.

Some Advantages:

1. Gives a detailed accounting of the case under study.
2. Helps the learner to see various alternative solutions to the problem.
3. Helps people develop analytical and problem-solving skills.

Some Limitations:

1. Some individuals may not see the relevance of the case being studied to their own situation or the group's problem.
2. A considerable amount of time and study is often required to develop the study.
3. Some group members are stimulated to overparticipation while others may assume a non-participatory role.

Physical Requirements:

1. Physical requirements vary with the type of presentation. If the case is presented through dramatic acting a stage area is required. If visual aids are required in the presentation, the room should be suitable for this kind of presentation. If the case study is a written one, a large table and chairs may be all that is necessary.

Procedure:

1. Materials are put into the hands of the participants in advance if the case study is in written form and to be read before the meeting.
2. Appropriate techniques to use during the presentation and discussion are selected, and parts rehearsed, if necessary.
3. The chairman or moderator introduces the topic, explains what the case study is, and the responsibility of each individual. He then guides the discussion and other activity.

SKIT

The skit is a short, rehearsed dramatic presentation involving two or more persons. It usually is acted from a prepared script and dramatizes an incident which illustrates a problem or situation.

The Skit May Be Used:

1. To introduce a topic for discussion.
2. To highlight a situation already introduced in a talk or film and to show its application to the community or to the group.

Some Advantages:

1. It awakens lively interest and stimulates discussion.
2. It personalizes a situation and promotes emotional involvement in the problem by the audience.
3. It demands active particpation by a few.

Some Limitations:

1. There is danger of over-acting.
2. Costumes and props should be kept to a minimum, but time is required for obtaining necessary materials.
3. Inappropriate humor and irrelevant action must be avoided.

Physical Requirements:

1. The skit should be played in a part of the stage in full view of the audience, but should not disrupt the setting for the rest of the meeting.
2. Shifting of furniture or scenery should be kept to an absolute minimum, but some may be necessary.

Procedure:

The skit may be used at any point in the program. It may precede or follow a lecture or film, symposium or panel, but should come before the discussion period. Two or more skits may be used (if so, they should be very short) to illustrate different approaches to a problem or "before" and "after." They may be given in succession or at different points in the program.

BUZZ SESSION

The buzz session is a technique for involving every member of a large group directly in the discussion process. Buzz groups are formed temporarily with a given time limit to discuss a specific topic with minimum structure and maximum interaction. It is not necessary that a decision be reached but serves especially well when interest, stimulation and consideration of diverse points of view are required.

The Buzz Session May be Used:

1. To develop questions for a speaker or panel.
2. To discover areas in which the group would like more information or further study.
3. To discover areas of special interest for future programs.
4. To evaluate a meeting, in terms of its value to the participants.

Some Advantages:

1. Provides a source of fresh ideas of real interest to the group.
2. When used in planning, it promotes individual identification with the program and its goals.
3. It gives everyone a chance to legitimize his ideas by sharing them with other group members.

Some Limitations:

1. The amount of individual participation is restricted by time.
2. Contributions of the several groups may be contradictory or difficult to combine.

Physical Requirements:

1. Small circles, round tables or short rectangular tables facilitate interaction.
2. It takes at least five participants to have an effective spontaneous buzz session. Five to 8 persons work well, but it can be larger.

Procedure:

1. The Chairman assigns limited and specific objectives to the buzz groups. Directions must be clear and explicit. If the audience is unfamiliar with the method, a demonstration group may be formed.
2. Each group designates a leader and a recorder quickly.
3. The leader sees that every member has his say. The recorder makes a written record of each contribution on the card provided.
4. The leader or recorder of each group gives an oral report to the entire assembly.

LECTURE OR SPEECH

A lecture is a carefully prepared oral presentation of a subject by a qualified expert. It is usually rather formal.

The Lecture or Speech May Be Used:

1. To present factual material in a direct and logical manner.
2. To present one point of view on a controversial subject.
3. For accounts of travels or personal experiences.
4. To entertain or inspire an audience.
5. To stimulate thinking and further study on a problem and to open the subject for general discussion.

Some Advantages:

1. It is suitable for audiences of any size.
2. It is easy to organize.
3. Some people can learn more easily by listening than by reading.

Some Limitations:

1. Good speakers informed on subjects of interest to your group may be hard to find. Experts are not always good speakers.
2. The role of the audience is passive.
3. Its effect on the audience is difficult to gauge. Feedback is limited.
4. Only one side of a question is presented with little chance for challenge or rebuttal.

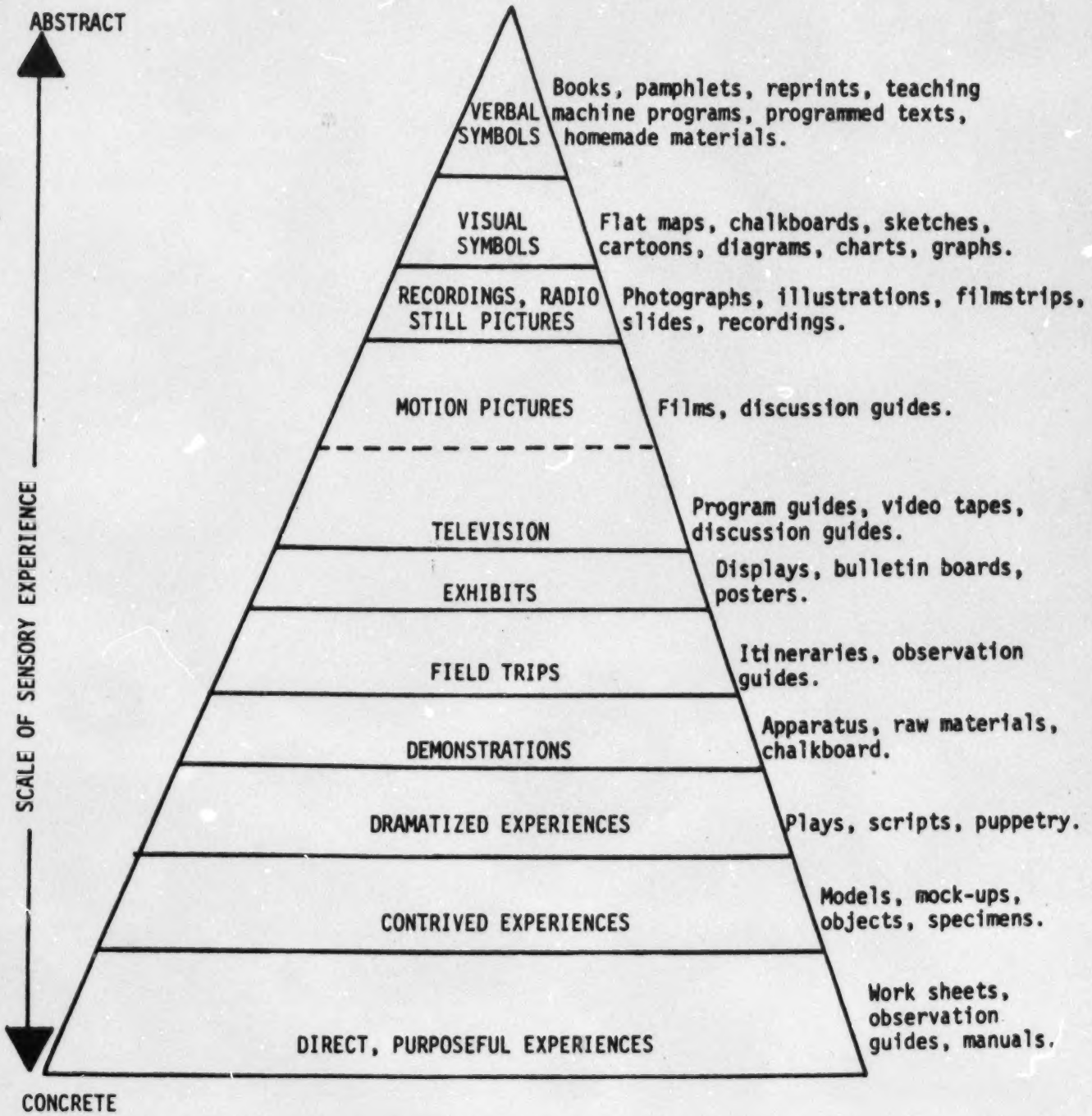
Physical Requirements:

1. Adequate seating so that every member of the audience may see and hear the speaker in comfort.
2. A stage or a slightly raised platform and a speakers' rostrum.

Procedure:

1. The chairman should introduce the speaker to the audience with brief remarks as to his position, his experience, or special qualification for this particular appearance.
2. If visual aids such as films, slides, maps, charts, etc. are to be used, they should be appropriate to the subject, to the audience, and so used as to heighten audience interest, not distract their attention.
3. At the conclusion of the prepared lecture the chairman should thank the speaker, and call for question period, discussion, or whatever has been planned as followup.

DALE'S CONE OF EXPERIENCE



D. HOW DO I KNOW WHEN I'VE GOTTEN THERE?

REASSESSMENT

The fourth step of the instructional model deals with reassessment or the measurement of learning. In general, the process can be as simple as readministering the diagnostic instrument. Comparing the second score with the first score provides a quick measure of progress and the amount of learning. Reassessment or retesting should correspond to the objectives identified previously. Measurement is mainly a counting process.

Test taking is only one of the ways of obtaining needed information. However, there are certain characteristics to consider when selecting and/or creating achievement-type tests, validity, reliability, and standards are important concepts for teachers. Validity addresses the question: does it measure what it is supposed to measure? Is it accurate?

Reliabilty addresses the idea of whether or not it measures the same thing. Is it consistent?

Standards relate to whether or not norms exist or set levels of performance which must be achieved. Obviously, the reliability, validity and standard setting will differ if tests are standardized or teacher made. Matching the selected test to the stated objective will insure that disadvantages of each type will be minimized.

If students are afraid of taking tests, the careful use of tests can desensitize students. By teaching test-taking skills and emotionally preparing students, much can be accomplished. (See page 112 for some tips on preparing students for tests.)

E. HOW WELL DID I DO?

EVALUATION

Evaluation is a system for collecting and analyzing reliable and valid information for the purpose of decision making. It definately involves more than just testing; it involves the professional judgement of the teacher.

The following pages in this section include a discussion of Evaluation. Then, there is an exercise to help you examine your own process of self-assessment. Appendix D provides a number of instruments from which you can pick and choose those you feel are most beneficial to your situation.

EVALUATION

Every day of our lives we are faced with evaluating information. We must decide among the many clothing choices offered by our bulging closets every morning. We have to decide whether to have juice or coffee or perhaps to skip both. We decide whether to take our umbrella or perhaps a sweater to work. We make these decisions based on information. The sky looks overcast. Our horoscope said to take special care with our health today. We determine the reliability and validity of that information based on experience, expertise, or maybe blind faith. Whatever the purpose, whatever our data source regardless of its accuracy, we are evaluating. We are evaluating ourselves, others, and the conditions of our environment.

Teachers are no exception. Teachers must evaluate everyday. It is their particular charge to evaluate the instructional program - its process and product. How effectively and efficiently they conduct evaluation can greatly effect the overall instructional program. One very adequate definition of evaluation has been presented by Evaluative Programs for Innovative Curricula in A Scheme and Structure for Evaluation. This definition describes evaluation as a "systematic procedure for collecting and analyzing reliable and valid information for the purpose of decision making." Four important aspects of this definition merit exploration:

1) it is systematic
2) for the purpose of collecting and analyzing
3) information that is valid and reliable
4) upon which to base decisions

A slapdash approach to evaluation will get the educator nowhere. Inconsistency and disorder are confusing to the learner and cannot serve to promote self-directed learning. Therefore, a procedure for evaluating instruction is crucial. A learner should know when, why and how his progress is likely to

be reviewed. The teacher should be familiar with a variety of approaches and techniques for reviewing learner progress as well as for determining his own teaching effectiveness.

Such an evaluation system should provide for the collection and analysis of data that is reliable and valid. The means by which information can be collected are many. Observation, self-evaluation, peer-evaluation, examinations, work samples, and oral participation are just a few data collection techniques. Different approaches are appropriate in different situations. Analysis of this data may depend on the means of collection. When analyzing evaluation information, the teacher must bear in mind the limitations and advantages of the data collection approach. The teacher must also be concerned with whether the information is reliable and valid data. For example, if different assessment approaches yield similar results, the data may be said to be reliable. The results are consistent. If the information is relevant to the purposes of evaluation, it may be said to be valid. That is, samples of a learner's work that focus on computational accuracy are appropriate measures of that learner's mathematical skill. That information is valid. Reports from a learner's employer as to how well he is getting along with his fellow workers is probably not a good indicator of his reading comprehension skills. Therefore, it would be invalid information upon which to make instructional decisions regarding that learner's reading comprehension skill.

Finally, the most important aspect of our definition of evaluation is that which refers to decision making. Information collected in a systematic fashion, analyzed carefully and then neatly stuffed in a file drawer does not help us to actualize evaluation. We must use this information to make decisions before our definition is complete. What kinds of decisions might we make? For one, we might make decisions as to the learner's readiness for new materials, new skills, new challenges. We might use this information to

guide the learner's continued study or might assess a learner's mastery of a skill or concept in order to confer a credential or to award a credit or grade upon him. We might use the information we collect to make decisions about our own teaching competence, about the materials or equipment we have selected to use, about the curriculum we follow. We might use evaluation data to make decisions about the total program, its impact or lack of it on the community. Evaluation is essential to the vitality and essence of teaching and to the process of individualized instruction.

EVALUATION MATRIX

This activity has been structured to assist you in assessing your own teaching. This is not a test; there are no right or wrong answers, so please complete the exercise as honestly and completely as possible.

DIRECTIONS: The row headings of the self-assessment matrix presented below represent four possible approaches to evaluating teaching effectiveness -- teacher self-assessment, student ratings, peer or supervisor (third party) observation, and student performance measures. The numerical column headings present a scale (explained below) along which you can check how frequently you use each assessment approach.

1 = I have never used this assessment approach; I need some suggestions before I try it out.

2 = I have seldom used this approach to collect evaluation data.

3 = I have used this approach occasionally as a means of collecting evaluation data.

4 = I use this approach frequently, it is a standard means by which I collect data.

Using the scale provided, place a checkmark in the cell that represents the frequency with which you use each technique to make decisions about your own teaching effectiveness. If you are not presently teaching, imagine yourself at that point in time when you were in the classroom, respond accordingly.

	1	2	3	4
SELF-ASSESSMENT				
STUDENT RATINGS				
THIRD PARTY OBSERVATION				
STUDENT PERFORMANCE				

INTERPRETATION:

If you rated yourself a 1 or 2 in any of the cells, we suggest that you refer to Appendix D of this booklet. It provides you with an overview of the advantages and limitations of each of the four evaluation approaches discussed. You can review only the approach or approaches you indicated you used infrequently or you may prefer to preview all of the information included as Appendix D, "Sample Evaluation Formats."

If you rated yourself a 3 in any of the cells, you should decide whether you might want to preview some suggestions for implementing that particular assessment approach. These suggestions are included as Appendix D.

If you rated yourself a 4 in all cells of the matrix, "Congratluations!" You obviously understand that no single approach to evaluating teacher effectiveness or any phase of the instructional program is sufficient. You use a variety of evaluation approaches and, no doubt, you note agreement or incongruity in the data you collect. You analyze this information and make instructional decisions based on these findings. Suggestions for implementing each of the four approaches are included as Appendix D, "Sample Evaluation Formats," for your use.

V. INDIVIDUALIZED INSTRUCTION

One of the primary things learned by teachers is that each student has an individual style of learning. Teaching in this type of environment is challenging, sometimes frustrating, but always rewarding when success is achieved. Individualized instruction requires a systematic approach to be successful. Some pertinent points concerning this systematic approach are included here. Note that the next pages, Animal School, and Individualized Instruction Assumptions set the stage for discussion of the process. All of the following elements must be present before individualization is complete:

A. Diagnosis - An assessment of the student's needs and interests. It can be accomplished with an informal interview or through a simple questionnaire. You can determine the student's goals, communications skills, motivation, interests, and any learning handicaps.

B. Prescription - A road map of the course of study for achieving specific objectives. This goal-setting process involves the student as well as the teacher. Skills required for obtaining the objectives, and specifying activities and materials to help the learner master these skills are also included as part of the prescription. (See Appendix F for sample prescription formats)

C. Management - There are as many approaches to classroom management as there are different learners. Individuals may work alone some of the time, but they may also work in groups. Grouping is important when learners are working on similar objectives and can be used for sharing experiences (especially good for teaching adults). Learning packets, modules, and learning stations can also be used. A good manager has as many of these options available as possible.

D. Evaluation - This requires decision making. Has the learner mastered each objective or must the learner repeat some phase of the program? Was the program that was developed and planned for this individual effective? (See Appendix D for sample evaluation forms).

The opinionnaire on page 104 can provide a basis for discussion concerning the merit or lack of usefulness of individualized instruction for your teaching situation.

Diagnosing Learning Styles and the Instructional Unit Plan present forms for looking at individual differences related to learning styles and selecting activities.

Individualization is a strategy of teaching that provides for student differences---differences in ability, differences in learning rates, and differences in goals. Individualized instruction is therefore a <u>need</u> and a <u>challenge</u>---a need for relevant and personalized learning, and a challenge to eliminate failure.

THE ANIMAL SCHOOL:

The Administration of the School Curriculum

with References to Individual Differences

Dr. George H. Reavis
Assistant Superintendent, Cincinnati Public Schools, 1939-1948

Once upon a time, the animals decided they must do something heroic to meet the problems of "a new world." So they organized a school.

They adopted an activity curriculum consisting of running, climbing, swimming, and flying. To make it easier to administer the curriculum all the animals took all the subjects.

The duck was excellent in swimming, in fact better than his instructor; but he made only passing grades in flying and was very poor in running. Since he was slow in running, he had to stay after school and also drop swimming in order to practice running. This was kept up until his web feet were badly worn and he was only average in swimming. But average was acceptable in school so nobody worried about that except the duck.

The rabbit started at the top of the class in running, but had a nervous breakdown because of so much make-up work in swimming.

The squirrel was excellent in climbing until he developed frustration in the flying class where his teacher made him start from the ground up instead of from the tree top down. He also developed a "charlie horse" from over-exertion and then got C in climbing and D in running.

The eagle was a problem child and was disciplined severely. In the climbing class he beat all the others to the top of the tree, but insisted on using his own way to get there.

At the end of the year, an abnormal eel that could swim exceedingly well, and also, run, climb, and fly a little, had the highest average and was valedictorian.

The prairie dogs stayed out of school and fought the tax levy because the administration would not add digging and burrowing to the curriculum. They apprenticed their children to a badger and later joined the groundhogs and gophers to start a successful private school.

Does this fable have a moral?

ASSUMPTIONS ABOUT INDIVIDUALIZING INSTRUCTION

INDIVIDUALIZED INSTRUCTION IS NOT DEPENDENT ON

1. One to one relationships.
2. A particular organizational structure.
3. One kind of content as opposed to another.
4. A particular type or level of learner.
5. A student working alone.
6. The use of gimmickry, gadgetry, or media.

INDIVIDUALIZED INSTRUCTION IS DEPENDENT ON

1. Provision of alternatives.
2. The actual relationship in the classroom & school or college between philosophy (what we believe) and practice (what we do).
3. Personal day-by-day use of theoretic models which answer:
   a. What is instruction?
   b. How do people learn?
   c. What's different about different learners?
4. Instructor flexibility
5. The use of individual standards rather than group standards.

INDIVIDUALIZATION IS A PHILOSOPHY

1. What do I believe about myself?
   Who am I?
   Why am I here?
2. What should I believe about adults?
   Should they be respected?
   Can they learn?
   Can they be trusted?
   Can they take responsibility?
3. What is the purpose of education?
4. What do I believe about teaching?
5. What do I believe about administration?
6. What do I believe about schools?

TO PERSONALIZE INSTRUCTION:

1. Know the person on the other end of the process.
2. Hear and see what he/she is "telling" you.
3. Be more committed to the individual learner than to the content to be learned.
4. Put yourself into the process.

GOALS OF INDIVIDUALIZATION

1. The first goal is to translate traditional skills and subject matter into behavioral objectives so that the diagnostic-prescriptive approach can be used.
2. The second goal is to use individualization to improve the self-concept of each student, to make a student feel good about himself while he is in the learning process.
3. The third goal is to help each student develop the skills to be a lifelong independent learner.
4. The fourth goal is to provide a relevant curriculum.

OPINIONNAIRE

Please rate the following statements according to the scale explained below.

5	4	3	2	1
strongly agree	agree	neutral	disagree	strongly disagree

_____ 1. Individualizing instruction is a lot of work for the teacher.

_____ 2. An individualized instructional program requires more of the learner.

_____ 3. Individualization of instruction is made easier by using materials suited to that purpose.

_____ 4. One primary goal of individualized instruction is to help the learner become self-directed.

_____ 5. The learner's individual interests play an important role in an individualized instructional program.

_____ 6. Success is assured for every learner in a program of individualized instruction.

_____ 7. Pre-testing is essential to an individualized program.

_____ 8. Content to be taught does not dictate the acceptance or rejection of individualization.

_____ 9. Individualized instruction requires the teacher to be knowledgeable about the skills taught by specific portions of a variety of materials.

_____10. I am totally committed to trying an individualized approach to instruction with my student clientele.

Reproduced from:
Individualized Instruction: Practice and Promise. College Station, TX: Adult and Extension Education, Texas A&M University, 1978.

ACTIVITIES FOR DIAGNOSING LEARNING STYLES

There are several ways in which learning styles can be diagnosed: pupil responses on a predictive instrument, pupil performance to carefully structured diagnostic activities, collection and compilation of data from the instructional setting. Unfortunately, there are, as yet, few validated instruments or formalized formats for diagnosis. Why not try your hand at developing some diagnostic approaches which could be used in your own setting:

ACTIVITIES (3-8 minutes each) TO TEST FOR STYLE

ITEMS FOR A PREDICTIVE INSTRUMENT

PLAN FOR COLLECTING DATA FROM THE INSTRUCTIONAL SETTING

INSTRUCTIONAL UNIT PLAN

SUBJECT AREA:_____

TOPIC: _____

GRADE LEVEL:_____

PLANNING TEAM_____

_____

_____

_____

INSTRUCTIONAL GOALS	INSTRUCTIONAL OBJECTIVES/SKILLS	PRE-ASSESSMENT	INSTRUCTIONAL ACTIVITIES	MATERIALS/RESOURCES NEEDED	MEASUREMENT

INDIVIDUAL INSTRUCTIONAL PLAN

STUDENT:_____

SUBJECT AREA:_____

TOPIC:_____

GRADE LEVEL:_____

PLANNING TEAM:_____

INSTRUCTIONAL GOALS	INSTRUCTIONAL OBJECTIVES/SKILLS	PRE-ASSESSMENT	INSTRUCTIONAL ACTIVITIES	MATERIALS/ RES. NEEDED	DATE TO BE INTRODUCED	ESTIMATED MASTERY DATE	MEASUREMENT

INDIVIDUAL PROGRESS RECORD

STUDENT:_____

SUBJECT AREA:_____

TOPIC:_____

GRADE LEVEL_____

EVALUATORS:_____

_____

_____

_____

INSTRUCTIONAL GOALS	INSTRUCTIONAL OBJEC/SKILLS	PRE-ASSESSMENT DATA	DATE INTRODUCED	DATE MASTERED	DATE LEFT IF NOT MASTERED	PROGRESS	HOW MEASURED	COMMENTS

121

122

VI. THE GED TEST

The basic purpose of the General Educational Development, or GED Test is to provide an alternative to a high school credential for those people who, for one reason or another were unable to complete high school by attending regular classes. It was not developed for, nor generally intended to be an alternative to a regular high school program of instruction. But it is intended to help those people who need the high school credential to meet employment or further educational training entry requirements.

The GED test was originally developed in the Second World War to assess the educational proficiency of young men who had been drafted from high school classrooms and who enlisted to serve in the armed forces. It proved to be an unusually popular concept and in 1945 it was extended to returning veterans after discharge from the military service. In 1947 it was made available to all civilian adults. Since that time the program has grown until all fifty of the states and the District of Columbia participate in the program; nine of the Canadian providences and territories; and seven U.S. territories and possessions.

The GED is a restricted test and therefore not available for inspection. Occasionally tests are lost or stolen so rigid security measures are taken by personnel involved in the program. Strict security is vital to maintain the test credibility. If copies were easily accessible to students, the test would quickly lose its value as a valid measurement of attainment.

The GED is administered by the General Educational Development Testing Service of the American Council on Education, One Dupont Circle, Washington, DC, 20036. The tests have been developed, normed and revised by various testing specialists; currently the Educational Testing Service (ETS). State Departments of Education are responsible for setting standards for certification, establishing testing centers and issuing credentials, including the GED itself.

The information on page 111 presents basic data about the content of the GED test batteries. One of the most common problems experienced by students is their fear of taking the GED test. Page 112 provides some test-taking skills which can be shared with students preparing for the test.

GED TESTS

Test 1: THE WRITING SKILLS TEST (80 items)

Spelling, Punctuation, and Capitalization (25%)
Grammar and Usage (30%)
Diction and Style (15%)
Sentence Structure (15%)
Logic and Organization (15%)

Test 2: THE SOCIAL STUDIES TEST (60 items)

Economics (20%)
Geography (15%)
Political Science (20%)
History (25%)
Behavioral Science (20%)

Test 3: THE SCIENCE TEST (60 items)

Biology (50%)
Earth Science (20%)
Chemistry (15%)
Physics (15%)

Test 4: THE READING SKILLS TEST (40 items)

Practical Reading (15%)
General Reading (35%)
Prose Literature (35%)
Poetry (10%)
Drama (5%)

Test 5: THE MATHEMATICS TEST (50 items)

Arithmetic (55%)
Geometry (20%)
Algebra (25%)

Administration time: 6 hours for entire battery.

TEST TAKING SKILLS

1. Read the directions carefully and follow them.

   a. Become familiar with test directions ahead of time.

   b. Take practice questions seriously.

   c. Ask questions immediately about directions.

   d. Become familiar with the multiple choice format of the examination as you use practice tests.

2. Understand the questions.

   a. Study questions prior to reading the selection.

   b. In some tests the questions proceed from simple to the more difficult. However, in the GED sub-tests, questions follow at random. Do not become discouraged if the first questions seem too difficult. Be sure to keep working.

   c. Know the meanings of key words or phrases.

   d. Rephrase the questions when necessary.

   e. Pay particular attention to such words as not, least, most.

3. Understand the selection.

   a. Refer to the text for correct answers.

   b. Look for whole rather than partial answers.

   c. Know the meanings of key words or phrases.

   d. For mathematics problems, actively check your answers.

   e. For Tests 1 (Correctness of Expression) and 5 (Mathematics) use the answer e (None of the above) sparingly and only when you are sure it is the correct one.

   f. In the solution of equations in the mathematics test, substitute possible answers.

   g. Eliminate those answers which are obviously incorrect.

   h. Do not be afraid to make an "educated guess." In fact, any guess is better than no response at all.

APPENDIX B

notes on adult education

Vol. 1, No. 1: 2 1976

COMPETENCY BASED ADULT EDUCATION: GOALS AND OBJECTIVES

These goals and objectives are the first in a series of Adult Performance Level Project products to be published in NOTES. We hope you find them useful tools for planning and implementing meaningful learning opportunities for the consumers of your programs.

This current version of the Adult Performance Level (APL) description of competency is arranged in five general knowledge areas: (1) Occupational Knowledge, (2) Consumer Economics, (3) Health, (4) Government and Law, and (5) Community Resources. Within each knowledge area, requirements are described in two successive levels of detail.

The first level is a *goal*. The goal statement is a broad description of what the functionally competent adult can do within that particular general knowledge area.

The goal is defined by a series of intermediate-level requirements called *objectives*. The objective is the fundamental building block of the APL description of competency. Some degree of mastery of these objectives, the degree depending on the adult's individual milieu, is required for functional competency.

OCCUPATIONAL KNOWLEDGE

GOAL: To develop a level of occupational knowledge which will enable adults to secure employment in accordance with their individual needs and interests.

OBJECTIVES:

1. To build an oral and written vocabulary related to occupational knowledge.
2. To identify sources of information (e.g., radio broadcasts, newspapers, etc.) which may lead to employment.
3. To define occupational categories in terms of the education and job experience required, and to know minimum requirements of given occupations.
4. To be aware of vocational testing and counseling methods which help prospective employees recognize job interests and qualifications.
5. To understand the differences among commercial employment agencies, government employment agencies and private employers.
6. To prepare for job applications and interviews.
7. To know standards of behavior for various types of employment.
8. To know attributes and skills which may lead to promotion.
9. To know the financial and legal aspects of employment.
10. To understand aspects of employment other than financial which would affect the individual's satisfaction with a job.

CONSUMER ECONOMICS

GOAL: To manage a family economy and to demonstrate an awareness of sound purchasing principles.

OBJECTIVES:

1. To build an oral and written consumer economics vocabulary.
2. To be able to count and convert coins and cur-

rency, and to convert weights and measures using measurement tables and mathematical operations.

3. To understand the concepts of sales tax and income tax.

4. To be aware of the basic principles of money management, including knowing the basics of consumer decision-making.

5. To use catalogs, consumer guides and other reference documents to select goods and services.

6. To be aware of factors that affect costs of goods and services and to determine the most economical places to shop.

7. To be aware of the principles of comparison shopping, and to be aware of the relationship of price to quality among brand names, and between "firsts" and "seconds" and to be able to substitute economy for quality according to individual needs.

8. To know the various methods by which goods are packaged and to know which methods are most cost-effective in terms of quality and storage.

9. To be able to take advantage of sales by knowing where to find them, by planning for their eventuality, and by being able to determine which are of worthwhile value to the individual.

10. To be aware of advertising techniques and to recognize appropriate and inappropriate forms of selling and advertising.

11. To know how to order food and to tip in a restaurant.

12. To be aware of different stores where home furnishings can be purchased and to determine the best buys for essential and luxury items based on individual needs and resources.

13. To determine housing needs and to know how to obtain housing and utilities based on those needs.

14. To know how to buy and maintain a car economically.

15. To know basic procedures for the care and upkeep of personal possessions (home, furniture, car, clothing, etc.) and to be able to use resources relating to such care.

16. To know the various media of exchange and to be familiar with banking services in the community.

17. To develop an understanding of credit systems.

18. To collect information concerning the types of insurance available and to be able to select the best insurance for the individual and his family.

19. To know the resources available to the consumer in the face of misleading and/or fraudulent product/service claims or tactics.

20. To understand the implication of consumption vis-a-vis finite world resources and to recognize that each individual's pattern of consumption influences the general welfare.

HEALTH

GOAL: To insure good mental and physical health for the individual and his family.

OBJECTIVES:

1. To develop a working vocabulary related to health, especially as it relates to basic medical and physiological terminology, for accurate reporting of symptoms and following a doctor's directions in applying treatments.

2. To understand how basic safety measures can prevent accidents and injuries and to recognize potential hazards, especially as such hazards relate to home and occupational safety.

3. To know medical and health services in the community.

4. To understand the physical and psychological influences of pregnancy as well as the need for proper prenatal care.

5. To understand the importance of family planning, its physical, psychological, financial and religious implications and to have knowledge of both effective and ineffective methods of birth control.

6. To understand general child rearing practices and procedures for guarding the health and safety of a child and to apply proper action in accordance with needs and resources.

7. To understand the special health needs and concerns of the adolescent (and his parents) and to become acquainted with some ways to ease the transition from childhood to adulthood.

8. To understand what contributes to good mental and physical health and to apply this understanding toward preventive care and health maintenance.

9. To understand the interaction of self as a member of small groups (family, work, club, class) and to use this understanding to promote effective interpersonal coping skills.

10. To be able to apply first aid in emergencies and to inform proper authorities of sudden illnesses, various accidents or natural disasters.

11. To plan for health or medical insurance and to be aware of available financial assistance for medical or health problems.

12. To understand what constitutes a proper diet

Notes on Adult Education, Vol. 1, No. 1: 2 1976. AdvancE, Stayer Research and Learning Center, Millersville State College, Millersville, Pa. 17551. Project Director: Erma D. Keyes; Project Manager and Publications Editor: Joseph F. Blake; Graphics Designer: Vaughn P. LeFever. *Notes* is made possible through a grant from The Division of Continuing Education of the Pennsylvania Department of Education. Opinions presented in this publication do not necessarily reflect the views of the Division of Continuing Education or The Pennsylvania Department of Education.

and to plan meals according to individual needs and resources.

13. To understand federal control of various drugs and items for health protection and to understand how public reaction influences this control.

GOVERNMENT AND LAW

GOAL: To promote an understanding of society through government and law and to be aware of governmental functions, agencies and regulations which define individual rights and obligations.

OBJECTIVES:

1. To develop a working vocabulary related to government and law in order to understand their functions in society and in the personal life of the individual.

2. To develop an understanding of the structure and functioning of the federal government.

3. To investigate the relationship between the individual citizen and the government.

4. To understand the relationship between the individual and the legal system.

5. To obtain a working knowledge of the various legal documents which the individual will need as a member of society.

6. To explore the relationship between government services and the American tax system.

COMMUNITY RESOURCES

GOAL: To understand that community resources, including transportation systems, are utilized by individuals in society in order to obtain a satisfactory mode of living.

OBJECTIVES:

1. To build an oral and written vocabulary pertaining to community resources and to define community resources in terms of (a) services to community members and (b) services to persons outside the community or non self-supporting members of society (unemployed, criminals, insane, etc.).

2. To know the types of community services provided for members of society including the purposes of and how to gain access to these services.

3. To understand how and when to apply for community services, such as Social Security, and Medicare.

4. To know various recreational services available in the community.

5. To be able to utilize information services of the community.

6. To be aware of the people and agencies in the community whose job it is to register and act upon citizen complaints.

SUBSET: TRANSPORTATION

OBJECTIVES:

7. To build an oral and written vocabulary of transportation terms, including car insurance terms.

8. To be able to recognize and utilize signs related to transportation needs.

9. To develop a familiarity with transportation schedules, and to calculate fares.

10. To be able to find and utilize information facilities.

11. To learn the use of maps relating to travel needs.

12. To recognize time zone boundaries and understand the concept of daylight saving time.

13. To request information on and make verbal and written travel and overnight accommodations/reservations.

14. To understand the relationship between transportation and public problems.

15. To understand driving regulations, including safety, courtesy, and rules such as having a driver's license, car license plates, etc.

APPENDIX C

HOLLYWOOD SQUARES

This activity involves the individual in matching teaching techniques with descriptors. You will need the following materials for each individual packet:

1. One large envelope with twelve squares drawn on it. Each square has one technique listed on each as given on page 120.
2. One Hollywood Squares Instructions Sheet (page 119) preferably on heavy paper, this goes inside the envelope.
3. One set of cut blocks. To make blocks:
   a. run page 121, descriptors, on one side of heavy paper or cardboard.
   b. run page 122, Dale's Cone of Experience, on back side of same paper.
   c. cut paper into square blocks following the existing lines.
   d. put cut squares inside envelope.
4. One copy of Dale's Cone of Experience, page 122 as model, place inside envelope.

You will need one set of each of the listed materials for each person who needs a packet.

Have individuals take out contents of envelope, and follow instructions on the "Hollywood Squares" instruction sheet.

"HOLLYWOOD SQUARES"

Instruction Sheet

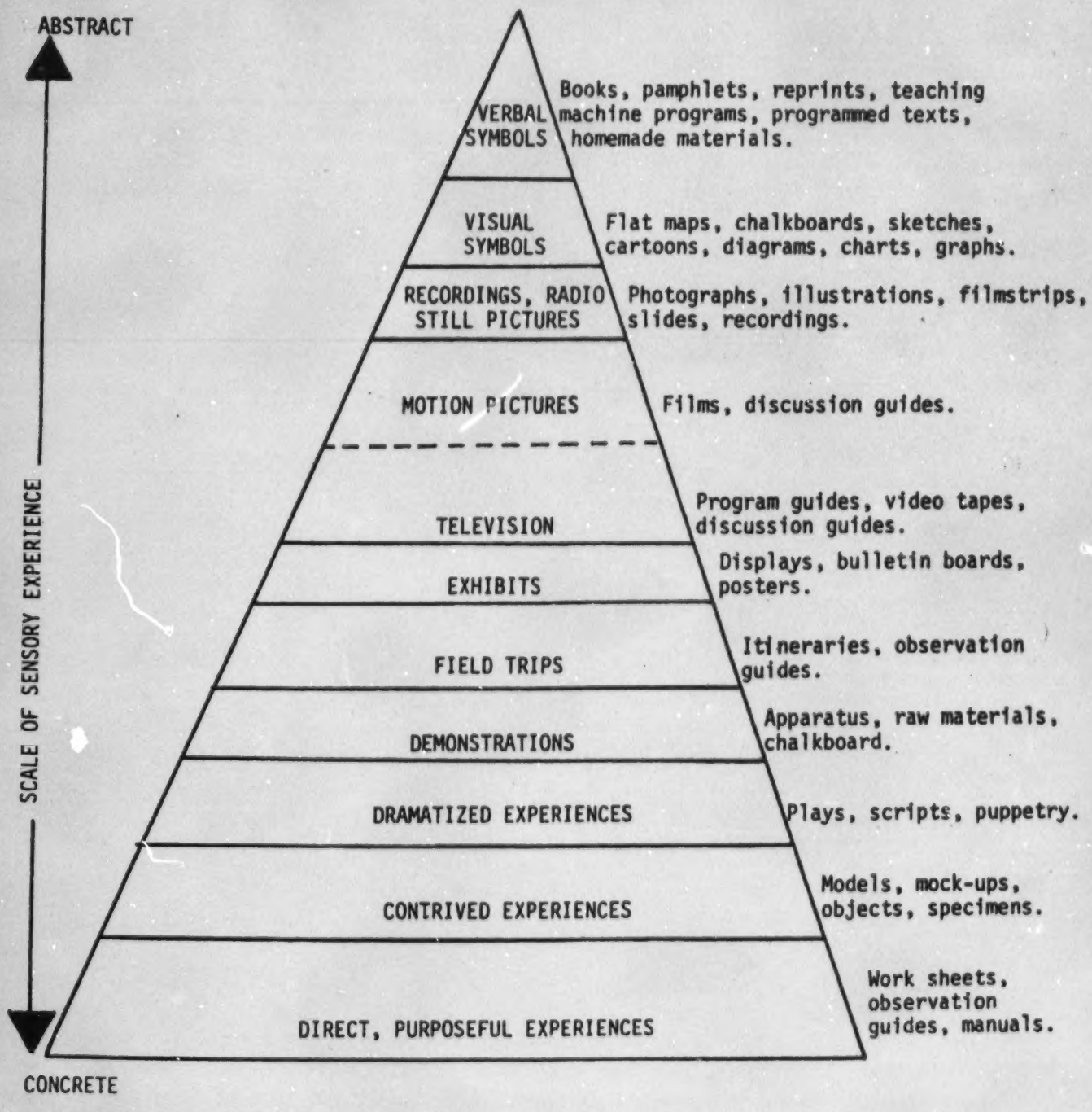
Directions: Match the teaching techniques in the squares on the envelope with the descriptors given on the blocks by placing the correct cut block on the appropriate descriptor square on the envelope.

To check your answers, place this cardboard page of directions over the completed puzzle. Holding the puzzle and cardboard securely, carefully flip the puzzle over. Lift the envelope. If Dale's Cone of Experience appears correct, your answers to the puzzle are right!

ROLE PLAYING	GROUP DISCUSSION	INTERVIEW
DEMONSTRATION	BRAINSTORMING	QUESTION PERIOD
FIELD TRIP	LECTURE	PANEL
REACTION SESSION	ACTIVE LEARNING	COMMITTEE

requires some "acting"	generates solutions/ plans of action	places resource person in informal setting
teaches by showing	encourages creativity, divergent thinking	provides for clarification of points/ideas
takes class for first-hand observation	suitable for audiences of any size	offers frequent change of speaker
free sharing of ideas/ experiences	demands a learner participation	plans a single activity or event

DALE'S CONE OF EXPERIENCE



APPENDIX D

EVALUATION PACKET

Contents

A) Self-assessment
four forms

B) Student Ratings
two forms

C) Third Party Observation
two forms

D) Student Performance
five guidelines

From: Individualized Instruction: Practice and Promise. College Station, Texas: Adult and Extension Education, Texas A&M University, 1978.

SELF-ASSESSMENT

Experienced teachers will probably recall times in class when they have done well and other times when they have done poorly. Often we, as teachers, tend to be our own worst critics. We look for perfection and accept anything less than perfection as evidence of failure. If, however, we think in terms of weighted values, we might find that we can be "good" teachers and still make mistakes.

On the other hand, some teachers tend to "blame" the student for poor teaching performance. This attitude lacks needed introspection and should be altered. Certainly, the teacher cannot take absolute and total responsibility for learner success but neither should the student have to suffer the consequences of a poor teacher's performance.

So the key to self-assessment seems to be fairness. How would you rate your performance over the past month? Have you been a great, good, mediocre or poor teacher? How would you rate your lesson preparation, choice of teaching aids and devices, or student follow-up?

Four sample self-assessment instruments are included on the following pages. Chosse one instrument and complete it. Remember, be fair. Does the result of the inventory correspond with your general self-rating? In what areas are you strong? In what areas are you weak?

TEACHER'S SELF APPRAISAL

Do You:

1. Know the names of your students?

_____Yes _____No

2. Arrive at class early?

_____Yes _____No

3. Dress neatly for each class?

_____Yes _____No

4. Smile and project a warm and inviting atmosphere?

_____Yes _____No

5. Speak clearly and distinctly?

_____Yes _____No

6. Keep your classroom neat and attractive?

_____Yes _____No

7. Prepare a lesson plan for each class?

_____Yes _____No

8. Know something about the background of each student?

_____Yes _____No

9. Speak clearly and slowly so that all can understand?

_____Yes _____No

10. Feel that you project that learning is exciting?

_____Yes _____No

11. Spend some time in the room after class so that the adult students may pursue matters that are not clear to them?

_____Yes _____No

12. Use many different techniques in your teaching procedure?

_____Yes _____No

13. Use various teaching aids and devices?

_____Yes _____No

14. Treat your students as adults?

_____Yes _____No

15. Encourage three-way communication - teacher-student, student-teacher, and student-student?

_____Yes _____No

16. Talk to your students instead of the blackboard?

_____Yes _____No

17. Admit it if you do not know the answer to a question but promise to search for it before the next session?

_____Yes _____No

18. Praise the adults when they make progress, no matter how small?

_____Yes _____No

19. Make every effort to make the classroom as physically comfortable as possible?

_____Yes _____No

20. Involve the adult students in determining their needs?

_____Yes _____No

21. Involve the adult students in planning learning experiences that will meet their needs?

_____Yes _____No

22. Inquire as to why students are absent?

_____Yes _____No

23. Follow up absentees?

_____Yes _____No

24. Know why students have dropped out?

_____Yes _____No

25. Use a wide variety of relevant materials rather than depending on a basic textbook for instructional purposes?

_____Yes _____No

TEACHER'S SELF-RATING SCALE

1. Ability to listen to others in an understanding way.

Low Don't hear	Average	Highly Receptive

2. Willingness to discuss my feelings in the group.

Unwilling Reserved	Average	Very willing

3. Awareness of the feelings of my students.

Unaware Ignore them	Average	Very sensitive Fully Aware

4. Acceptance of criticism of my behavior.

Resentful Defensive	Average	Welcome it Accept and use it

5. Reaction to unfamiliar values and customs.

Negative Reject them	Average	Interested Understanding

6. Reaction to opinions opposed to mine.

Low tolerance Annoyance	Average	Welcome them Glad to be challenged

7. Reaction to expressions of warmth and affection.

Embarrassed	Average	Easily give and receive warmth

TEACHER SELF-ASSESSMENT CHECKLIST

	Feel Competent	Could Use Help	Wonder How Class Sees Me
Do I really enjoy working with adults and helping them learn?	___	___	___
Have I studied and reflected on the need for adult education?	___	___	___
Am I aware of individual differences among adult students, and how these affect my relationships with them?	___	___	___
Have I conscientiously sought to identify individual differences in my class group?	___	___	___
Have I prepared my material to deal with these differences?	___	___	___
Have I a system for making continuous evaluation of an individual's growth?	___	___	___
Have I arranged to devote ample time to the preparation and leadership of my adult group?	___	___	___
Am I striving to become more of a leader and a learner in my class, and less of a formal instructor?	___	___	___
Do I accept student criticism with a sense of understanding?	___	___	___
Am I bringing in qualified people who make contributions toward the group objectives?	___	___	___
Do I know what equipment is available and am I using it to best advantage?	___	___	___
Have my materials and methods been adapted to and grown from the everyday experiences of my adult group?	___	___	___
Am I making use of the members of my group who can contribute to group goals?	___	___	___
Am I making use of libraries, museums, public agencies, civic organizations, and news media?	___	___	___

	Feel Competent	Could Use Help	Wonder How Class Sees Me
Am I keeping the group moving from the simple to the complex?	____	____	____
Am I using information from today's meeting in preparation for tomorrow's?	____	____	____
Have I made the best arrangement of the physical equipment to meet the needs of handicapped individuals?	____	____	____
Have I brought about a comfortable social atmosphere for the group?	____	____	____
Am I allowing my leadership to be improved by group evaluation?	____	____	____
Have I established good relations with other members of the staff and am I familiar with their programs?	____	____	____

TEACHER SELF-APPRAISAL

The following self-appraisal is for your own use. It should assist you in looking at good practices in working with adults. Periodically answer the questions to ascertain whether or not you are following these practices. Add other items you feel are necessary.

DO YOU:	YES	NO
1. Know the names of your students?	___	___
2. Know something about the background of each student?	___	___
3. Promote an atmosphere that is warm and inviting?	___	___
4. Speak clearly and distinctly?	___	___
5. Keep your learning area attractive and conducive to adult learning?	___	___
6. Prepare lesson plans/contracts for/with your students?	___	___
7. Guide learners to become responsible for their own learning?	___	___
8. Spend some time in the area after class so that students may have individual conferences?	___	___
9. Use variety of teaching techniques?	___	___
10. Use various teaching aids, equipment, and materials?	___	___
11. Encourage students to exchange ideas?	___	___
12. Inform students on a regular basis about their progress, strengths, and weaknesses?	___	___
13. Keep accurate student files?	___	___
14. Follow-up students who drop out or are frequently absent from class?	___	___

Student ratings

A number of psychologists have investigated the effects of subjects on the outcomes of scientific experiments. They have found that some subjects will either behave as the experimenter wishes or behave contrary to the researcher's wishes depending on their (the subjects') perception of the experiment.

The same principle may also apply to student ratings. Some students will dislike a teacher and therefore rate his performance lower than it deserves, or (probably more often) rate the teacher's performance higher than it deserves. In either case, the validity of this evaluative data is questionable.

For this reason you should always instruct the students to rate you as fairly as possible and to do so anonymously. Student ratings can provide suggestions for change and point out areas of need. If precautions are taken and accurate ratings are obtained, this evaluation technique can add an important dimension to information for teacher self-improvement.

How would your students rate your teaching performance? Review the enclosed student evaluation forms and choose one of your liking. Estimate how your students would rate you on this form. You may wish to make copies of the form and distribute it to your students for rating.

After you have obtained a student rating, compare the results with the results of your self-evaluation. Are the results of both in agreement? In what areas do they differ? What might be the reasons for apparent inconsistencies?

HOW WOULD YOU RATE MY TEACHING?

Will you help me become a better teacher? You can do this by filling out this form as candidly as possible. Don't sign your name, and if you think I might recognize your handwriting print or type your answers or ask a friend or relative to fill them in.

1. Did I move along so fast that you had difficulty keeping up?

2. Did I move along so slowly that you got bored?

3. Did you find this course exciting_____ fairly interesting_____ dull_____?

4. Which of the things we did this year did you find the most interesting? Will you explain why?_____

_____

_____

5. Which of the things we did were least interesting to you? Will you explain why?_____

_____

_____

6. Do you think the books and other study materials we used were:

_____ Hard to read
_____ Interesting and informative
_____ Dull
_____ Outdated
_____ Too Juvenile

7. Were you ever tempted to drop out of this course? Yes_____ No_____. If so, will you explain why?_____

_____

_____

Student Evaluation of Teacher Form

Following is a list of items relative to your teacher. Read each one carefully and then circle the number underneath each statement that best describes how you feel your teacher performed regarding this item. A rating of 5 is the most desirable he or she can receive, and a rating of 1 is the least desirable. After circling your rating, space is provided for you to make written comments should you so desire.

1. Interest in Subjects Taught:

5	4	3	2	1
Always Interested		Mildly Interested		Disinterested in Subject

Comments_____

_____

2. Knowledge of Subjects Taught:

5	4	3	2	1
Well Informed		Average		Inadequately Informed

Comments_____

_____

3. Preparation of Subject Material:

5	4	3	2	1
Always Prepared		Occassionally Prepared		Seldom Prepared

Comments_____

_____

4. Presentation of Material:

5	4	3	2	1
Interesting		Average		Dull

Comments_____

_____

5. Attitude Toward Different Views:

5	4	3	2	1
Welcomes Differences in Viewpoints		Occassionally Biased But Usually Tolerant		Intolerant; Does Not Allow Contradiction

Comments_____

_____

6. Attitude Toward Students:

5	4	3	2	1
Always Courteous and Considerate		Usually Considerate But Finds It Difficult at Times		Inconsiderate and Rude

Comments _____

_____

7. Approachability Outside Class:

5	4	3	2	1
Welcomes Calls Outside of Class		Tolerates Calls But It is Evident That They are Not Appreciated		Does Not Wish to be Bothered

Comments _____

_____

8. Personal Appearance:

5	4	3	2	1
Appropriate		Usually Appropriate		Seldom Appropriate

Comments _____

_____

9. Personal Peculiarities:

5	4	3	2	1
Free from Annoying Mannerisms		Moderately Free From Annoying Mannerisms		Constantly Exhibits Irritating Mannerisms

Comments _____

_____

10. General Estimate of Teacher:

5	4	3	2	1
Superior		Average		Inferior

Comments _____

_____

STUDENT EVALUATION OF TEACHER AND CLASS

We would like to have your input so that we can make improvements in our program. Your responses will be confidential. DO NOT WRITE ON THIS SHEET.

The following is a list of items about your teacher and class. Read each one carefully. To record your response, place a circle around the appropriate letter corresponding to the item number on the answer sheet.

1) Write your teacher's name on the answer sheet.

2) Instructional level in which you are enrolled:
   A. ABE
   B. GED or High School Diploma
   C. ESL
   D. Other

3) Location of Instruction:
   A. Adult Learning Center
   B. Other

4) How long have you attended class?
   A. 1-3 months
   B. 4-6 months
   C. Over 6 months

5) My teacher is:
   A. Always interested in the subjects taught.
   B. Usually interested in the subjects taught.
   C. Mildly interested in the subjects taught.
   D. Disinterested in the subjects taught.

6) My teacher seems to be:
   A. Always well informed about the subject.
   B. Usually informed about the subject.
   C. Not very well informed about the subject.
   D. Poorly informed about the subject.

7) My teacher's presentation of the material is:
   A. Always interesting.
   B. Usually interesting.
   C. Occasionally interesting.
   D. Dull.

8) My teacher uses a variety of teaching methods.
   A. All the time.
   B. Usually.
   C. Seldom.
   D. Never.

9) We use different kinds of materials (books, machines, audiovisual aids, etc.) in class.
   A. All the time.
   B. Usually.
   C. Seldom.
   D. Never.

10) My teacher's attitude toward different views is:
   A. Welcomes differences in viewpoints.
   B. Usually tolerant.
   C. Occasionally tolerant, usually biased.
   D. Intolerant; does not allow contradiction.

11) My teacher's attitude toward students is:
   A. Always courteous and considerate.
   B. Usually considerate.
   C. Occasionally considerate.
   D. Inconsiderate and rude.

12) My teacher:
   A. Gives me a lot of individual attention.
   B. Gives me some individual attention.
   C. Gives me a little individual attention.
   D. Gives me no individual attention.

13) My teacher's accessibility outside class is:
   A. Always welcomes conferences outside class.
   B. Usually welcomes conferences outside class.
   C. Tolerates conferences outside class.
   D. Refuses any contact outside class.

14) My teacher's personal appearance is:
   A. Always appropriate.
   B. Usually appropriate.
   C. Seldom appropriate.
   D. Never appropriate.

15) My teacher's conduct is:
   A. Always free from annoying personal mannerisms.
   B. Usually free from annoying personal mannerisms.
   C. Seldom free from annoying personal mannerisms.
   D. Constantly exhibits irritating mannerisms.

16) My general estimate of my teacher is:
   A. Excellent
   B. Good
   C. Fair
   D. Poor

17) Are counselor services available to you?
   A. Yes.
   B. No.
   C. I don't know.

18) If yes to #17, how many times have you used the counselor?
   A. Never
   B. 1-2 times
   C. 3-4 times
   D. 5 times or more

19) During class, I am:
A. Always busy.
B. Usually busy.
C. Seldom busy.
D. Never busy.

20) Because of my attendance in class, I believe I have satisified:
A. All of my original objectives.
B. Most of my original objectives.
C. Very few of my original objectives.
D. None of my original objectives.

21) Will you take other adult education classes as a result of completing this class?
A. Definitely.
B. Probably.
C. Slight chance.
D. Definitely not.

22) Would you recommend this class to a friend?
A. Yes, definitely.
B. Probably.
C. Doubtful.
D. No, definitely not.

23) Compared with what I hoped to get from this class, I feel I got:
A. More than what I expected.
B. About what I expected.
C. Slightly less than I expected.
D. Much less than I expected.

24) Please make comments on the back of the answer sheet about any other things you liked or disliked about the adult education program.

Texas Education Agency
Division of Adult Programs
158 East Riverside Drive
Austin, Texas 78702

ANSWER SHEET

STUDENT EVALUATION OF TEACHER AND CLASS

1. Teacher's Name: _____

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D

11. A B C D

12. A B C D

13. A B C D

14. A B C D

15. A B C D

16. A B C D

17. A B C D

18. A B C D

19. A B C D

20. A B C D

21. A B C D

22. A B C D

23. A B C D

Third party observation

Good evaluation must be objective. Unfortunately you and your students may be biased in one way or another and thus be unable to provide good objective evaluation data. For this reason some kind of third party evaluation is often a good idea.

Frequently, supervisors and/or peers attempt to evaluate teachers. While they may represent a new and fresh approach, they are not necessarily objective in their evaluation. Their evaluations may be biased for or against you. In addition, their evaluations may be based on visits of very limited duration that cannot possibly reflect the whole spectrum of your teaching performance. Also, you may tend to "put your best foot forward" or to be nervous when your teaching performance is being evaluated. Of course, it is easy to understand why a person would do this, but the result is an unrepresentative sample of teaching performance. Students may behave differently when the teacher is being evaluated as well. In a public school situation, students often develop an elaborate communications network to detect whether or not the principal is in the area. If a loud and unruly class suddenly becomes courteous and studious, chances are an administrator is near! Adults will not behave so dramatically but their behavior can change when the teacher is being evaluated.

Even with these cautions, third party evaluations are necessary and generally good evaluation approaches. If observation is used along with other dimensions of evaluation such as self-assessment and student rating, more evaluation data is available from which to draw conclusions and make decisions.

OBSERVING AN ADULT EDUCATION CLASSROOM

1. Physical set-up of classroom. Row seating with instructor at front is least effective. Circle seating, so participants can see each other or work stations, or interest stations around the room for individualization is best.

Excellent Very Good Good Fair Poor Very Poor

Why?_____

2. Comfort of room: ventilation, lighting, size of chairs, use of AV material.

Excellent Very Good Good Fair Poor Very Poor

Why?_____

3. Techniques of instruction. Straight lecture is only one method of teaching adults. Meaningful discussion and participation is preferred. Varied methods should be used within one class period.

Excellent Very Good Good Fair Poor Very poor

Why?_____

4. Level of material. Instructor must have variety of methods that let him know whether class material is at proper level. Instructor who is oblivious of problems participants have relating to subject is poor. Qualitative testing out of level with participants is good.

Excellent Very Good Good Fair Poor Very Poor

Why?_____

5. What is happening within the classroom? Although it seems good, an instructor who is really a master of ceremonies and sees that everyone has fun is not teaching. There should be real, observable evidence of learning.

Excellent Very Good Good Fair Poor Very Poor

Why?_____

6. How do you feel the instructor sees himself? The instructor who acts as if he is the only knowledgeable person within the classroom sets himself apart from the participants and seems to sermonize is probably not as effective as the one who shares, provokes people to react, and involves the participants.

Excellent Very Good Good Fair Poor Very Poor

Why?_____

7. What are the best things you observed in the class?_____

_____

8. What were the least effective things you observed?_____

_____

9. How would y ate the class as an adult continuing education experience?

Excellent Very Good Good Fair Poor Very Poor

Course_____ Instructor:_____

School_____ Day_____ Hour_____ Observer_____

SUPERVISOR OR PEER'S

GUIDE FOR EVALUATING INSTRUCTION

Excellent	Competent	Needs Improvement	
			INTRODUCTION
			1. Did the instructor establish contact with the class?
			2. Was the objective clear?
			3. Was the feeling of need created?
			EXPLANATION
			4. Was the material well organized?
			5. Were the main points emphasized?
			6. Did the instruction have continuity between points?
			7. Were frequent summaries used?
			8. Were illustrations and examples used to vitalize the material?
			DEMONSTRATION
			9. Were steps of procedure properly emphasized?
			10. Was equipment skillfully handled?
			11. Were assistants used properly?
			12. Was explanation and demonstration coordinated?
			13. Were safety precautions and points of difficulty emphasized?
			14. Was demonstration summarized?
			INSTRUCTOR QUALITIES AND SPEECH TECHNIQUES
			15. Did the instructor possess poise and confidence?
			16. Did he possess good bearing and appearance?
			17. Were any distracting mannerisms present?
			18. Was he forceful and enthusiastic in his delivery?
			19. Did the instructor maintain contact with the class?
			20. Does he express his ideas clearly and fluently?
			21. Was the phraseology and usage acceptable?
			USE OF TRAINING AIDS
			22. Were the aids used in this lesson adequate?
			23. Were they used to the best advantage?
			24. Were proper techniques employed?
			25. Was blackboard work effective?
			CLASS PARTICIPATION
			26. Did the instructor properly plan for the student participation?
			27. Were correct conference techniques employed?
			28. Were students given an opportunity to apply the material presented?
			29. Were student questions and answers handled with skill?
			DISCUSSION AND CRITIQUE
			30. Were student questions cleared up?
			31. Did the summary emphasize the main points of the subject?
			32. Was the closing statement effective?
			PREPARATION
			33. Was there evidence of careful planning?
			34. Did the general plan for the lesson indicate a sound approach to the subject?
			35. Was the best use made of the time available?

Student Performance

One might logically ask why student performance is not considered as an indicator of teaching quality. After all, teachers are paid to teach and teaching is useless if learning does not occur. This is a logical argument. If we look solely at learning outcomes, however, we run the risk of making false conclusions.

In the first place, learning is a difficult response to measure. Standardized tests give a reasonably good estimate of cognitive achievement, but they are not infallible. How could one measure such learning outcomes as the ability to cope successfully in social situations or a student's attitude toward school or self-concept? These factors present measurement and evaluation problems.

Besides, how can we be sure that learning is the result of teaching? How can we say that learning might not have occurred anyway? Most researchers are now saying that individual ability, student background, peer influence, motivation and classroom characteristics all interact with teacher behaviors to produce learning. An elaborate research design is needed if student performance is to be used as the sole indicator of teaching quality.

While it is dangerous to attribute all learning outcomes to teacher quality, it is safe to say that "good teaching makes for more learning." So teachers should be aware of student performance as at least one indicator of teacher evaluation. Attached are some suggestions from the Educational Testing Service on how to construct effective items of cognitive measure. You may wish to review these suggestions before you develop your next classroom test for measuring student gain. Remember, only a good test instrument can supply you with reliable and valid information for decision making.

EXHIBIT 4.1

GUIDELINES FOR CONSTRUCTING MULTIPLE-CHOICE ITEMS

1. Each item should test one, and only one, central idea.
2. Each item should be independent of every other item; one item should not aid in answering another item.
3. Write as clearly, simply, briefly, and correctly as possible; eliminate all nonfunctional words.
4. Avoid textbook phraseology and examples; whenever feasible, use new situations and terms.
5. The item stem should present the central problem and all qualifications; it should include all words that otherwise would occur in each alternative.
6. Avoid negatively stated items.
7. If an item includes controversial material, cite the authority whose opinion is being used.
8. Alternatives should be homogeneous in content, form, and grammatical structure.
9. There should be one, and only one, correct response; this alternative should be clearly correct.
10. All distractors should be plausible and attractive to students who do not know the correct answer; yet they should be clearly incorrect or inadequate.
11. Distractors may represent common misconceptions, logical alternatives, frequent mistakes, or other plausible but incorrect information.
12. Alternatives should not overlap, include, or be synonymous with each other.
13. Avoid irrelevant clues to the correct response provided by response length, grammar, repetition of key words, common associations, explicitness of response, etc.
14. If alternatives fall in a logical arrangement—e.g., alphabetically, by magnitude—list them in this order.
15. The position of the correct responses should not fall in a pattern but rather be randomized.

EXHIBIT 4.2

GUIDELINES FOR CONSTRUCTING TRUE-FALSE ITEMS

1. Items should deal with a single idea, not a combination of several ideas.
2. Express each item simply and clearly in words whose meanings are definite and precise; include no more than one qualifying phrase.
3. Statements should be entirely true or entirely false, not partially true and partially false.
4. The crucial element in the statement should be apparent to the student; the truth of the statement should not rest on trivial details or trick phrases.
5. Items should be based on significant facts, principles and generalizations.
6. Include approximately equal numbers of true and false items on the test; make sure correct responses do not fall in a pattern.
7. Whenever possible, use quantitative rather than qualitative terminology.
8. Do not create false statements by inserting "not" into true statements.
9. Avoid mere repetition of textbook statements and statements that are minor variations of textbook statements.
10. Avoid specific determiners—i.e., words like sometimes, never, always—that may provide clues to the correctness of the statement.
11. When items refer to controversial material or to matters of opinion or value, cite the authority whose opinion is being used.

EXHIBIT 4.3

GUIDELINES FOR CONSTRUCTING SHORT-ANSWER ITEMS

1. Try to phrase items so that there is only one possible correct response.
2. Phrase items so that the student is clear what type of response is demanded; that is, so he knows the length and preciseness of response required, or, in an item with a numerical response, the units in which the answer should be expressed.
3. The response, preferably, should be a single word or short phrase.
4. Avoid using statements taken directly from the text.

[Rules 5–7 apply to completion items.]

5. Omit only key words, not trivia.
6. Place the blank near the end of the sentence.
7. Avoid overmutilated items; include a maximum of two blanks within an item.

EXHIBIT 4.4

GUIDELINES FOR CONSTRUCTING ESSAY QUESTIONS

1. The question should clearly and unambiguously define the task for the student, but without interfering with the measurement of the intended outcomes.
2. The question should indicate the direction and scope of answer desired.
3. The question should require the student to demonstrate his command of essential background knowledge.
4. Use questions that have clearly acceptable correct answers, rather than ones that only measure opinions or attitudes.
5. It is usually better to use more specific questions which can be answered briefly rather than fewer broad, general questions.
6. Do not use optional questions.
7. Start essay questions with phrases such as: compare and contrast, present the arguments for and against, give the reasons for, explain how (or why), give an example of, and so on.

EXHIBIT 4.5

COMPARISON OF ESSAY AND OBJECTIVE TESTS

	Essay	*Objective*
Abilities Measured	Requires the student to express himself in his own words, using information from his own background and knowledge. Can tap high levels of reasoning such as required in inference, organization of ideas, comparison and contrast. Does *not* measure purely factual information efficiently.	Requires the student to select correct answers from given options, or to supply an answer limited to one word or phrase. Can *also* tap high levels of reasoning such as required in inference, organization of ideas, comparison and contrast. Measures knowledge of facts efficiently.
Scope	Covers only a limited field of knowledge in any one test. Essay questions take so long to answer that relatively few can be answered in a given period of time. Also, the student who is especially fluent can often avoid discussing points of which he is unsure.	Covers a broad field of knowledge in one test. Since objective questions may be answered quickly, one test may contain many questions. A broad coverage helps provide reliable measurement.
Incentive to Pupils	Encourages pupils to learn how to organize their own ideas and express them effectively.	Encourages pupils to build up a broad background of knowledge and abilities.
Ease of Preparation	Requires writing only a few questions for a test. Tasks must be clearly defined, general enough to offer some leeway, specific enough to set limits.	Requires writing many questions for a test. Wording must avoid ambiguities and "give-aways." Distractors should embody most likely misconceptions.
Scoring	Usually very time-consuming to score. Permits teachers to comment directly on the reasoning processes of individual pupils. However, an answer may be scored differently by different teachers or by the same teacher at different times.	Can be scored quickly. Answer generally scored only right or wrong, but scoring is very accurate and consistent.

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APPENDIX E

WIN AS MUCH AS YOU CAN
An Intergroup Competition

Set up groups of eight. Each group is sub-divided into four pairs, each pair sitting as if on four sides of a card table. Each pair is given a copy of the tally sheet and asked to study it. The facilitator reads the following directions:

1. The title of this activity is "Win As Much As You Can". You are to keep that goal in mind throughout the experience.
2. There are three key rules:
   a. You are not to confer with other members of your cluster unless you are given specific permission to do so. This prohibition applies to nonverbal as well as verbal communication.
   b. Each dyad must agree upon a single choice for each round.
   c. You are to insure that the other members of your cluster do not know your dyad's choice until you are instructed to reveal it.
3. There are ten rounds to this exercise. During each round you and your partner will have one minute to mark your choice for the round. Remember the rules. You have one minute to mark your choice for round one.
   a. Share your decision with the other members of your cluster.
   b. Mark your score card on the Tally Sheet for round one according to the payoff schedule.
   c. Are there any questions about the scoring? (the response to all questions concerning the purpose of the activity should be, "the name of the game is, "Win As Much As You Can".)
4. (The facilitator continues the game as follows):
   a. You have one minute to mark you decision for round two.
   b. Has any partnership not finished?
   c. Share and score.
5. Continue rounds three and four like rounds one and two.
6. Round five is a bonus round. The Tally Sheet indicates that all amounts won or lost on this round will be multiplied by three. Before you mark your choice for this round, you have time to discuss this exercise with the others in your cluster. After the discussion, you and your partner will have one minute to discuss your decision, as before. You have three minutes for group discussion. (Stop discussion after three minutes). You and your partner have one minute to mark your decision for round five. Remember the rules are in effect. (After one minute). Has any partnership not finished? Share and score.
7. Rounds six and seven continue like rounds one through four.
8. Round eight is conducted like round five, with the bonus value increased from three to five times par.)
9. Round nine is conducted like rounds one through four and rounds six and seven.
10. Round ten is conducted like rounds five and eight, with the bonus value increased to ten times par.
11. Each cluster computes its net score from the four dyadic scores. Example: +18, -21, +6, and +2 = +5. It is possible for each cluster to score+100, i.e. +25, +25, +25, +25, if all four dyads choose Y, the collaboration option, in each round.

The facilitator opens the discussion of the process and its implications. The following key points should be raised.

1. Does the "You" in "Win As Much As You Can" mean you as a dyad or you as a cluster?
2. The effects of competition and collaboration should be considered.
3. How does the cluster's net score compare to the possible net score of 100?
4. How does this experience relate to other group situations?

WIN AS MUCH AS YOU CAN TALLY SHEET

DIRECTIONS: For ten successive rounds you and your partner will choose either an "X" or a "Y". The "pay-off" for each round is dependent upon the pattern of choice made in your cluster:

4 X's:	Lose $1.00	1 X:	Win $3.00
		3 Y's:	Lose $1.00 each
3 X's:	Win $1.00 each		
1 Y:	Lose $3.00	4 Y's:	Win $1.00 each
2 X's:	Win $2.00		
2 Y's:	Lose $2.00 each		

STRATEGY: You are to confer with your partner on each round and make a joint decision. Before rounds 5, 8, and 10 you confer with the other dyads in your cluster.

ROUND	TIME ALLOWED	CONFER WITH	CHOICE	$WON	$LOST	$BALANCE	
1	2 mins.	partner					
2	1 min.	partner					
3	1 min.	partner					
4	1 min.	partner					
5	3 mins. + 1 min.	cluster partner					Bonus round: pay-off is multiplied by 3
6	1 min.	partner					
7	1 min.	partner					
8	3 mins. + 1 min.	cluster partner					Bonus round pay-off is multiplied by 5
9	1 min.	partner					
10	3 mins. + 1 min.	cluster partner					Bonus round: pay-off is multiplied by 10

APPENDIX F

Prescription and Progress Report Format

A set format is a useful tool for simplifying not only the prescriptive phase of the process of individualizing instruction but also the maintaining of student progress and mastery. Such a format can serve a dual function. It can streamline prescription writing as well as give the learner control of his learning environment. With a projected prescription written and maintained, the learner can readily see what activities he has finished, what skills he has mastered and what he has left to accomplish in order to reach his goal. Also he can quickly see what materials and activities are suggested for helping him achieve that goal. *No one format is ideal.* The teacher should select one that is easy for her/him to use as well as easy for the learner to understand and use. Some sample formats are included in this enclosure to give you an idea of how to construct such a progress form for your situation. Instructions for use and the source are written at the top of each format sheet. Only a portion of the format is shown for illustration purposes. It is hoped that these samples will provide some ideas for using these sheets in your own situation.

NUECES COUNTY PRESCRIPTION FORMATS

The following reading and English prescription formats are designed and used by the Adult and Continuing Education program in Nueces County, Texas. The format represents a cataloguing of materials cross referenced to the skills identified by the TABE test. An effort has been made to include a multitude of materials from which to choose to teach each skill. The counselor or teacher would indicate with a check mark those materials appropriate under each skill for a given learner to complete. The date that this material is started can be marked in the TEACH column. As the student masters the skill covered by the prescribed material, a date would appear in the RETEACH column if additional practice was needed or in the PROCEED column if mastery was achieved. This has proven to be a functional format in that it is easily understood by the learner, quick and easy for the assessor to complete, easy to maintain on a regular basis and offers many instructional options to the counselor or teacher prescribing for a specific skill deficiency. It does not include the technique or strategy to be used when presenting the material. The learner is still fairly dependent on the instructor for directions as to material usage.

READING PRESCRIPTION - INTERMEDIATE

NAME_____ DATE_____ POINTS_____ LEVEL_____ M D

OBJECTIVES AND ACTIVITIES	TEACH	RETEACH	PROCEED
I. Word Recognition Skills			
A. Sight Words			
_____ Functional Word List for Adults			
B. Phonetic Analysis			
_____ Reading Today's English, Bk. 2, pp. 10E, 18C, 26C, 43D, 55D, 75A, 81C, 93B, 113B, 126D			
_____ Discoveries to Make (New Avenues in Reading), pp. 37-39B, C, D, F, G; 42C, D, E; 45-47D, E, F, G, H, J; 50-52C, D, E, F, G; 55J, K, L, M			
_____ Challenges to Meet (New Journeys in Rding.) pp. 36D, E, F; 40E, F, G, H; 45D, E, F; 50I, J			
_____ Reading Essentials Skills (Study Scope) Level B, C, D			
_____ Specific Skills Series "Working with Sounds: A, B, C, D, E			
_____ C. Structural Analysis			
Prefixes			
_____ Reading Today's Eng., Bk. 2, pp. 42B, 59B			
_____ Discoveries to Make, pp. 23D, E, F, G			
_____ Challenges to Meet, pp. 19C-H, 20D-H			
_____ Activities for Reading Improvement, Bk. 1 (AFRI), pp. 89, 93-97			
Suffixes			
_____ Rding. Today's Eng., Bk. 2, pp. 50B, 80B, 89A, 28C			
_____ Discoveries to Make, pp. 28C, D, E			
_____ Challenges to Meet, pp. 24D-F			

_____AFRI, Bk. 1, pp. 94, 108-110, 144D
_____AFRI, Bk. 2, pp. 89
_____"Words: Their Origin, Use and Spelling" filmstrip
A123-2 Roots and Shoots
Syllabication
_____Rding. Today's Eng., Bk. 2, p. 86F
_____Discoveries to Make, pp. 20G, H; 25G; 32D, H
_____Challenges to Meet, pp. 28C-G; 49F

II. Vocabulary Development
_____Rding. Today's Eng., Bk. 2, every lesson
_____Discoveries to Make, pp. 5B, DI 9D, E, F; 13C; 23C: 28B, 31B; 45C, 53A, 59A,C; 76G; 79B; 93C
_____Challenges to Meet, pp. 5D,F, H; 10D, E; 13C; 20D; 32C, D,E,F,G: 35G-49G,H;57C,d:(13,F,71F,85D,96I,113G
_____AFRI, Bk.1,pp.4B,C;10B,C;14B;19B;25B;26D; 30B; 33B; 43B;46B,C;78C,D;88B;91C;95-100;113-199;125D,E;130D; 136;143C,D,E;152D;153C,D,E;
_____AFRI, Bk.2,pp.4B,C;11B,C;23E;27C;38C,D;44C;49D;57C; 61C,D;65B;68D;72B;76C;81C;86C;90-92;98;100-111; 115D;143D,E; 153D,E;
_____Specific Skills Series "Using Words in Context "ABCDE
_____Dorsett Teaching Machine Program, sets V,W,X
_____Wordcraft Kit with tapes
_____SPA Vocabulab III, Levels A,B,C,D

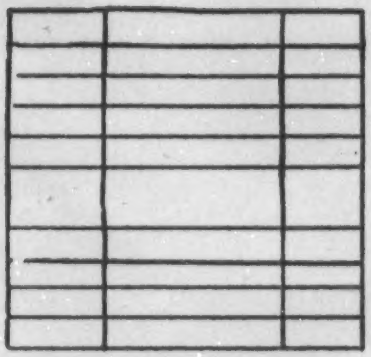
III. Following Written Directions
_____Rding. Today's Eng., Bk. 2, pp. 10F,14D, 18E,22D,26D, 47D,56E,63C,68D,90E,130F
_____AFRI, Bk.1, pp. 54-60, 70A, 80-84
_____AFRI, Bk. 2, pp. 47A,50-53
_____EDL "Listen and Read" Level EA Lesson 10
_____LSI Rding. Comp. "Following Direct." A,B,C,D,E

IV. Finding Information
A. Parts of a Book
_____Discoveries to Make, pp. 94D,E; 113C,D
_____Challenges to Meet, p.80C,D
_____LSI Rding. Comp. "Reference" Series A-B, Lesson 5, 21, 28, 38, 33, 51, 41, 47, 44, 52, 59, 65, 109, 137, 141
B. Knowing How to Find Information
_____LSI Rding. Comp. "Reference" Series A-B, C-D, E-f
C. Graphs & Charts
_____Challenges to Meet, pp. 86F,G; 85D,E
_____AFRI, Bk. 3, pp. 71A, 55A,B; 67A; 90A, B
D. Alphabetizing
_____Discoveries to Make, pp.60D, E,F,G; 64D, 0;87A-E
_____Challenges to Meet, pp. 53D, E; 94A, B
_____Lang. Ex., Blue Bk., pp.17-20
_____EDL Study Skills Library, Reference, EEE Lesson 1
E. Index and Table of Contents
_____Challenges to Meet, pp. 80D, C
_____LSI Rding. Comp. "Reference" Series A-B Lessons 5,21 28, 38, 33, 51, 41, 47, 44, 52, 59, 65, 109, 137, 141
_____EDL Study Skills Library, Reference EEE, #2
F. Maps
_____Discoveries to Make, pp. 99D
_____Challenges to Meet, pp. 71, 91B, C, D

_____AFRI, Bk. 1, p.62A,B
_____AFRI, Bk. 2, p.60A,B
_____SRA Map and Globe Skills Kit
_____LSI Rding. Comp. "Ref." A-B, Lessons 122, 129, 139
_____EDL "Listen and Read" Level D Lesson 7

G. Library and Encyclopedia

_____AFRI, Bk. 2, pp. 33-38
_____LSI Rding. Comp. "Reference" Series C-D The Library
_____EDL "Listen & Read: Level EA Lesson 9
_____EDL Study Skills Library, Reference EEE #8)
_____Challenges to Meet, pp. 88H, 96F, H, 87F, 95F, H



ENGLISH PRESCRIPTION - ADVANCED

NAME_____ DATE:_____ POINTS_____ LEVEL M D

OBJECTIVES AND ACTIVITIES	TEACH	RETEACH	PROCEED
I. Capitalization			
____Mastering Capitalization & Punctuation (Continental Press) pp. 1-6, 8, 13, 7, 9-12, 14			
____English Essentials, pp. 14-17			
____Cambridge Correctness & Effect. of Exp., pp.163-174			
____Barron;s How To, pp. 122-124			
____GES Review, pp. 12-13			
____GES English, pp. 70-71			
____LSI English Lang. "Capitalization" Series E-F			
____SVE Filmstrip A127-12			
II. Punctuation			
A. End Punctuation			
____Mastering Capit. & Punc., pp.15-16			
____English Essentials, pp. 18-19			
____Cambridge Corr. & Effect. of Exp., pp. 145-147			
____Barron's How To, pp. 118			
____LSI Eng. Lang. "Punctuation" Series E-F, Lessons 7,10, 6, 21			
____SVE filmstrip A127-7			
____GES English, pp. 72-73			
B. Comma			
____Cambridge Corr. & Effect. of Exp., pp. 147-149			
____Barron's How To, pp. 118-120			
____LSI English Lan. "Punctuation" Series E-F, Lessons 23, 25, 41, 46, 47, 63, 65, 81, 87, 83, 85, 101, 107, 103, 105, 121, 126, 127, 123, 125, 141, 146			
____SVE filmstrip A127-1 thru A127-6			
C. Apostrophes			
____Mastering Capit. & Punc., pp. 47-50			
____English Essentials, p. 24			
____GES English, pp. 86-87			
____Cambridge Corr. & Effect. of Exp., pp. 151-152			
____Barron's How To, pp. 120-121			
____LSI Eng. Lang. "Punct." Series E-F Lessons 143,145 161, 166, 167, 163, 165, 181, 186, 187, 183, 206, 201			
____SVE filmstrip A127-10			
D. Quotation Marks			
____Mastering Capit. & Punc." pp. 33-46			
____English Essentials, pp. 24-26			
____GES English, pp. 82-85			
____GES Review, pp. 24-25			
____Cambridge Corr. & Effect. of Exp., pp. 152-154			
____Barron's How To, p. 121			
____LSI Eng. Lang. "Punc." Series E-F Lessons 45, 61, 66,67			
____SVE filmstrip A127-10			
____Mastering Capit. & Punc., p. 4 (capit. in quotes)			
____LSI Eng. Lang. "Punc." Series E-F Lessons 13, 21,5, (capit. in quotes) 29,41,17			
E. Other			
____GES English, pp. 80-81, 88-91			
____Cambridge Corr. & Effect. of Exp., pp. 145-160			
____Barron's How To, pp. 118-122			
____SVE filmstrips A127-8 ; ;			
____SVE filmstrips A127-9 () dash			
____SVE filmstrips A127-11 italics & Hyphen			

KENTUCKY READING PRESCRIPTION

The following prescription format is taken from the Kentucky ABE Materials Guide. The guide is a compilation of available materials cross referenced to the TABE test. It is essentially a catalogue rather than a format. However, it provides an idea for a format. The counselor or teacher could circle or check the materials that each learner should complete for mastery of skills. As a format, it is lacking the potential for keeping track of time spent since there is no place for a date to be entered. There is also no place to indicate mastery. It is a very thorough listing of resources.

TEST 2
SECTION E

LEVEL Beginner
UNDERSTANDING WHAT IS READ
Understanding Main Ideas and Sequences

PRESCRIPTION	BOOK NUMBER	PAGES	PUBLISHER
The New Streamlined English Series	3	35,47,71,83,115,125	New Readers
Operation Alphabet	2	22,71	Noble & Noble
Operation Alphabet	2	106,109,154	Noble & Noble
Specific Skill Series	A B C	Getting the Main Ideas Detecting the Sequence	Barnell Loft
GO	AA	36,58,62,82,87,90,96,98,	EDL
		114,122,130	
GO	BA	3,68,95,99,119	EDL
GO	CA	4,8,11,23,36,43,75,78,82,	EDL
		87,95,114	
Programmed Reading	6	*	McGraw Hill
Programmed Reading	7	*	McGraw Hill
Programmed Reading	8	*	McGraw Hill

Reading Prescription, Cont.

TEST 2
SECTION E

LEVEL Intermediate
UNDERSTANDING WHAT IS READ
Understanding Main Ideas & Sequences

PRESCRIPTION	PAGE NUMBER	PAGES	PUBLISHER
How to Read Better	1	7,10,16,19,21,22,25-28,43,	Steck Vaughn
		46,49,52,55	
How to Read Better	2	6-8,12,13,23,33,36,41,43,	Steck Vaughn
		46,47,53,55,58,62	
Listen-DA		*	EDL
Listen and Read-EA		21,22,24-26,33-37	EDL
Listen and Read-FA		35-42,63-66	EDL
Activities for Reading Improvement	1	2-4,7-10,13,14,16-19,23,24,	Steck Vaughn
		32,33,40-45,124	
GO	EA	3,7,11,19,35,68,72,79,109 110	EDL
GO	DA	36,52,108	EDL
New Journeys in Reading		4,6,9,13,15,19,24,31,35,39,	S.V.
		40,44,45,48,49,52,65,66,69,	
		75,79,89	
Progress in Reading		6,7,10,14,22,29,37,47,67,84,	S.V.
		100,116,123,128	
New Goals in Reading		13,18,19,23,31,33,54,61,69,	S.V.
		74,95,96,98,99,106,109,111,	
		112	
Mastery in Reading		3-25,31,35,37,44,45,69,70,	S.V.
		89-108,120,124,131,133-135, 142	
Be A Better Reader	A	16,17,30,53,99,115	Prentice Hall

Reading Prescription, Cont.

PRESCRIPTION	BOOK NUMBER	PAGES	PUBLISHER
Be A Better Reader	C	16,17,37,42-45,68,90-93, 142,167	Prentice Hall
Be A Better Reader	I	5,37,50,51,53,55,62,63,67-69, 80,85,119,125,127	Prentice Hall

SAMPLE PRESCRIPTION SHEET

A prescription format might be something as simple as the following. To complete such a form, the teacher or counselor would need a catalogue of available resources keyed to specific objectives. For a program with a small student body or for students with no commonality, no related interests or needs, this form might serve well. It is time-consuming to complete and, therefore, will not probably foster long range prescribing. An attempt is made with this format to provide the learner more freedom to manipulate his instructional environment by describing suggested ways of best utilizing the resources available, i.e., the ACTIVITIES description section.

NAME_____ DATE_____

GENERAL GOAL:_____

SPECIFIC OBJECTIVE(S):_____

INDIVIDUALLY PRESCRIBED INSTRUCTION

OBJECTIVE	MATERIALS	ACTIVITIES

The Oklahoma State Department of Education, in compliance with Title VI of the Civil Rights Act of 1964 (P. L. 88-352) Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, handicap, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, financial aid, educational and counseling services.

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